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VOLUME XX A.

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1914.

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PREFACE.

The first Gazetteer of the Amritsar District was published in 1883-84. In his preface the Editor noted that, with certain exceptions, the great mass of the text had been taken almost, if not quite, verbally from a draft Gazetteer compiled between 1870 and 1874 by Mr. F. Cunningham, Barrister-at-law, and from Sir H. Davies' Settlement Report of 1856.

The second edition was prepared in 1893 by Mr. J. A. Grant, Settlement Officer. Practically the whole of the previous volume was re-written and the information and figures were throughout brought up to date.

It was decided by Government that a new edition should be compiled during the course of the re-settlement just completed. Mr. Grant's volume has accordingly been brought up to date by the light of the information and statistics collected at the census of 1911, and certain sections have been entirely re-written. But the bulk of the descriptive matter of a general character has been retained with little amendment. The contents of the volume have, however, been re-arranged and in the present edition the various subjects are dealt with strictly in accordance with the directions contained in the Financial Commissioners' Standing Order No. 43.

I am indebted to Mr. R. H. Crump, I.C.S., for much useful assistance in the preparation of the work. The statistical tables referred to in the text are all to be found in Volume B of the Gazetteer, which was published in 1913.

H. D. CRAIK,

May 1914. *Settlement Officer, Amritsar.*

TABLE OF CONTENTS.

CHAPTER I.—DESCRIPTIVE.

SECTION A.—PHYSICAL ASPECTS.

CHAPTER I.—DESCRIPTIVE—continued.

SECTION A.—PHYSICAL ASPECTS—concluded.

SECTION B.—HISTORY.

SECTION C.—POPULATION.

CHAPTER I.—DESCRIPTIVE—continued.

SECTION C.—POPULATION—continued.

CHAPTER I—DESCRIPTIVE—concluded.

Section C.—Population—concluded.

CHAPTER II.—ECONOMIC.

Section A.—Agriculture.

CHAPTER II.—ECONOMIC—continued.

SECTION A.—AGRICULTURE—concluded.

CHAPTER II.—ECONOMIC—continued.

SECTION B.—RENTS, WAGES AND PRICES.

SECTION C.—FORESTS.

SECTION D.—MINES AND MINERAL RESOURCES.

SECTION E.—ARTS AND MANUFACTURES.

CHAPTER II.—ECONOMIC—concluded.

SECTION F.—COMMERCE AND TRADE.

SECTION G.—COMMUNICATIONS.

SECTION H.—FAMINES.

CHAPTER III.—ADMINISTRATIVE.

SECTION A.—ADMINISTRATIVE DIVISIONS.

SECTION B.—CIVIL AND CRIMINAL JUSTICE.

CHAPTER III.—ADMINISTRATIVE—concluded.

Section H.—Police and Jails.

CHAPTER I.—DESCRIPTIVE.

Section A.—Physical Aspects.

CHAP. I, A.

Physical Aspects.

Derivation of name.

Amritsar means "the tank of nectar or immortality" and the district derives its name from the sacred tank in its capital city on which the Golden Temple of the Sikhs is built. This was originally a small natural pool of water, and is said to have been a favourite resort of Bába Nának, the first *Guru* or apostle of the Sikhs. The site was permanently occupied by the fourth *Guru*, Rám Dás, who in 1577 obtained from the Emperor Akbar a grant of land in the neighbourhood. The pool soon acquired a reputation for sanctity, and the following of the *Guru* migrating to the sacred spot, a small town grew up known at first as Rámdáspur or Guru-ka-chak, and later as the pool improved and formed into a tank, as Amritsar. This is the commonly accepted derivation, but another version has been suggested from the name of Amar Dás, the predecessor of Rám Dás. The original form of the name in this case would be Amarsar, or tank of Amar (Dás).

Boundaries and general configuration.

With the exception of Gurdáspur, Amritsar is the most northern of the five districts, which form the Lahore Division, as now constituted. It lies between north latitudes 29° 56′ and 31° 11′, and between east longitudes 73° 55′ and 75° 37′. In shape, it is a nearly rectangular block, being a section of the tract known as the Bári Doáb, or country lying between the Rávi and Beás rivers. It is bounded on the north-west by the river Rávi, which separates it from the Raya tahsil of the Siálkot district and on the south-east by the river Beás, which forms the boundary between Amritsar and the Kapurthala State. To the north-east lies the district of Gurdáspur, to the south-west that of Lahore. It is divided into three tahsils, or fiscal sub-divisions, named Amritsar, Tarn Táran, and Ajnála, the last named occupying all that portion which fronts the Rávi, and the two former abutting on the Beás. No part of the district is touched by the Sutlej. That river joins the Beás at the point where the three districts of Lahore, Ferozepore and Amritsar, and the Kapurthala State meet. No portion of any Native State is included within the limits of Amritsar.

Scenery.

To the eye the district presents the appearance of a continuous level plain, unbroken by hill or valley, dotted with clusters of mud-roofed houses, and sparsely wooded, except near villages and irrigation wells, and along the main roads and canals. The prevailing soil is a light reddish-yellow loam, known to the people as *maira*, but this stiffens into *rohi*, or clay, where the surface drainage collects on its way down the Doáb from the hills, and occasionally degenerates into strips of sandy, slightly uneven soil, locally known as *tibba*, bare of trees and apt to be blown into hillocks by the wind. There are no hills within its limits, and

CHAP. I, A.
Physical Aspects.
Scenery.

nothing of the nature of rock or stone is to be met with. The formation is distinctly alluvial. Though apparently of a uniform level, the country, in reality, slopes to the north-west from the high right bank of the Beás to the left bank of the Rávi, a fact which is evidenced by the height of the water in the wells, and there is also a gentle slope, of perhaps 2 feet in the mile, down the Doáb, which slightly broadens out as the two rivers diverge after issuing from the hills above Gurdáspur. The district is absolutely devoid of noticeable natural features, unless we except the Dhaia, as the high cliff bank of the Beás is called, the sandy ridge running nearly down the centre of the Doáb, the scarcely perceptible drainage lines, which carry off the surface water, and the perennial stream known in Ajnála as the Sakki, to be presently mentioned.

Rivers: The Beás.

The Beás river takes its rise in the north of the Kulu valley, and passing through the Kángra district, and between Gurdáspur and Hoshiárpur, enters the sandy valley, which divides the Amritsar district from Kapurthala. Here the Beás valley is bounded on the right or Amritsar side by an abrupt cliff, varying in height from 20 to 30 feet, the upper part of which is hard clay mixed with *kankar*, and the lower stratum usually, though not always, fine river sand. At the foot of this, between it and the cold-weather bed of the river, lies a strip of alluvial land, which at some points is as much as two miles broad. At other points, the cold weather stream passes so close under the cliff, that only a pathway is left. Elsewhere again, backwaters from the river penetrate this strip of *bet* land, marking the place where, at some former time, the river has eaten into the high bank, and left a curved bay of rich alluvial land. The left bank, on the other hand, is uniformly low, and on the Kapurthala side there is a stretch of moist alluvial land running back for several miles into the interior, which is fertile, well wooded and liable to inundation. There is a tradition that about a century ago, the river ran under the village of Hamira in Kapurthala territory, seven miles distant from its present course, and the depression is still clearly traceable. At present the stream hugs the high western bank, more or less closely, throughout the whole of its course, past this district. What cultivation there is in the valley is carried on between the foot of the cliff and the normal cold weather stream, or in the bays of older land which lie back where the cliff recedes. At places there are openings in the cliff, where surface drainage from the uplands discharges into the valley, bringing with it a deposit of sand. The river itself carries an immense body of water in the rainy season, and in flood time, may be nearly a mile in width and from 30 to 35 feet in depth. But the floods, swollen by the melting snows on the hills, quickly subside and have passed their worst by the beginning of August, after which the higher portions of the inundated land are sown with coarse rice and pulses. In the cold weather, the river rarely sinks so low as to be fordable,

CHAP. I, A.
Physical Aspects.
The Beás.

and is seldom over a hundred yards wide. The North-Western railway crosses it by a new bridge close to the station, known as Beás, and close to the point at which the Amritsar and Tarn Táran tahsils meet. Here for road traffic a bridge of boats used to be maintained, but this has been discontinued. Troops passing along the Grand Trunk road are at present ferried across at some inconvenience; but the old railway bridge is being converted into a roadway. The high bank, on the Amritsar side, precludes the river being used for inland irrigation purposes, unless a canal were to be taken out far up in the Gurdáspur district, near where the river leaves the hills.

The Rávi.

The Rávi is a river of a different character. Both banks are for the most part of equal height, and the river in flood time encroaches impartially on either side, setting now on one bank and now on the other, and transferring whole villages by a process of erosion and accretion from one to the other side of the main stream. For the last four miles of its course past Amritsar, the bank is considerably higher, even resembling the Dhaia which overlooks the Beás, but at no other point in its course is the bank sufficiently high to withstand the force of the flood current. It carries rather more fertilizing silt than the Beás (which from the comparative clearness of its water is sometimes called the *nili* or blue) and where this silt is thrown up heavy crops of wheat, can, after the lapse of a year or two, be raised. But cultivation in the river bed is always precarious. In the cold weather, the Rávi dwindles to a small stream, owing to the Bári Doáb Canal drawing off most of the water at Mádhopur, and the river is fordable opposite almost every village. Indeed much of the cold weather stream comes from springs in the bed of the river, and very little of what leaves the hills, finds its way down to the lower reaches.

There is no bridge of boats on the Rávi. One used to be maintained at Kakar, three miles from the Lahore border, to serve the traffic on the road between Amritsar and Gujránwála, but it was given up many years ago.

The Sakki.

The only other perennial stream found in the district, is that known as the Sakki *nala*. It rises in the Bahrámpur marsh in the Gurdáspur district, and is there known, not as the Sakki, but as the Kiran. It enters the Amritsar district near Ram Dás, and winds through the Ajnála tahsil in a deep tortuous bed between abrupt banks, past Ajnála and Sáurián and finally falls into the Rávi at Ránián, near where the bridge of boats used to be on the Gujránwála road. At times it rises in flood, and the volume of water is sometimes swelled by escape water, let into it by a channel cut from the canal at Aliwál in Gurdáspur, when the canal is closed for repairs. There is reason to believe that it follows the course which the Rávi once took, or rather that it flows just under what used to be the high left bank of the Rávi. Certainly the left bank

CHAP. I. A
Physical Aspects
The Sakki.

of the Sakki is generally the higher of the two, and is hardened by the nodules of *kankar* with which, near Kariál and Sáurián, and up to the confluence with the Rávi, the left bank abounds. Consequently the tract between the Sakki and the Rávi is a more recent alluvial formation than the rest of the district. The stream is sluggish and erosion of the banks is almost unknown. Damage is done by floods, however, to the spring crops sown on the shelving land sloping down to the edge of the banks, and by spills into depressions leading from the Sakki towards the Rávi. As its floods deposit no silt, it is not always a welcome neighbour, for, besides the damage occasionally caused by it, it is a great interruption to communications. It is only bridged at the point where the road from Ajnála to Raya crosses it, and though there are fords and local village ferries at other points, it can only be passed by a loaded cart with considerable difficulty.

Some fifteen years ago a small canal was constructed, taking out of the Sakki within Gurdáspur limits. It is managed by the Gurdáspur District Board but irrigates a few acres in the Amritsar village of Rám Dás which lies on the border of the district. A rate of Rs. 2 per acre is charged on the crops so watered. The Mahant of the Gurudwára at Rám Dás annually throws a temporary dam across the Sakki in the cold weather and with the aid of the water so diverted raises a few acres of wheat or gram. A proposal to construct a permanent dam at this point is now under consideration.

The Patti drainage line.

Of the less important drainage lines or *rohis* the chief are the Patti *rohi*, the Kasúr *nala* and the Hudiára line. The first named separates the central sandridge from the plateau of firm lands which stretches up to the high bank of the Beás. It begins in the Gurdáspur district and, entering the Amritsar tahsil in two branches, passes into Tarn Táran. Near the village of Kang in that tahsil, the branches meet, and the *rohi* then runs out into Kasúr near the village of Lauhka. To quote from the 1892 Assessment Report of Tarn Táran " water only flows along this flood line at intervals of several years, after exceptionally heavy rain, and the line consists of a broad shallow depression, marked on both its edges by a strip of sandy soil, sometimes forming into shifting sand hills, but more usually taking the form of undulating slopes which are sown with crops of wheat and gram, *jowár* and pulses. The chance of flood is so small that the whole is sown even to the centre of the depression. Floods (as in 1875) have been known to do considerable damage to the land lying in the track of this line, choking up wells with the sand brought down, and going near to wrecking villages within its influence. But in an ordinary year, the depression is so shallow and indistinct, and cultivation so general, in and on the edges of the line, that all that would be noticed by a casual observer crossing it, would be that the ground had changed from level to undulating,

CHAP. I. A.
Physical Aspects.

that trees were scanty, and the soil was sandy, instead of the usual light loam.

The Kasúr *nala*.

The course of the Kasúr *nala* is strongly marked both in Amritsar and Tarn Táran. Whereas the Patti line is broad, shallow, and only acts as a flood line in the rainy season, and then only in exceptional years; the Kasúr *nala* is narrow, runs within better defined banks as a rule, has a deeper channel, and often carries water three or four times in a year, both in winter and summer. In and along the sides of its bed the soil is mostly hard clay and rarely sandy. The slope down to it consists of broken ground, is not marked by sand hills, and is more abrupt, and thus flood water comes down it with greater velocity. No canal water is led across it, and it forms the boundary between the 4th and 2nd administrative Divisions of the Bári Doáb Canal.

The Hudiára drainage line.

The Hudiára line takes its name from a village in Lahore past which its course eventually takes it. It is not known by that name in Amritsar, but is generally called by the name of some one of the villages which lie near to where the line is prominently marked. It too emerges from the Batála tahsil, and carries off the drainage of the tract which lies between the main and Lahore branches of the canal. The basin round Amritsar city lies in the track of one of its branches, and it passes under the railway near the Gharindá Police thána, finally leaving the Tarn Táran tahsíl at Rája Tál. It resembles the Kasúr *nala* in its surroundings and seldom fails to do considerable damage in a wet winter. In the summer floods are yearly expected, and crops are not sown where they are likely to be reached by the water. This drainage line has, however, been lately deepened and straightened under the supervision of the canal department, and it may be hoped that these measures will make it a more effective outlet for the flood water of the tract it serves.

Swamps.

There are other minor drainage lines forming quite a net work in the southern part of Ajnála. Canal irrigation has interfered a good deal here with the natural flow of drainage. The lines here often take the shape of a chain of swamps or *chambhs*, the principal of which are found at Bhalápind, Bagga, and Jastarwál. These only occasionally run completely dry, but the Bagga *chambh*, being supplied with an outlet channel down to the Sakki, is the first to dry up. These three, and the swamp at Vadála Viram in the Amritsar tahsil, are the only marshy depressions, which need be noticed, and even they are of little importance as physical features. Large perennial swamps like the Bahrámpur and Kahnuwán *jhils* in the Gurdáspur district are not found in Amritsar.

Botany.

(*a*) Trees.

The district is fairly well provided with trees. The lower part of Tarn Táran, once known as the Khára Mánjha on account of its brackish water, is somewhat bleak, but with the spread of canal irrigation, some improvement in this respect is taking place. To

CHAP. I. A Physical Aspects. (a) Trees.

take first the trees usually grown by cultivators, or else indigenous to the country remote from towns the *pipal* (*ficus religiosa*) is the most prominent. This is planted for shade at the gates of villages, and round the ponds formed by the excavations made in building the mud huts of which the villages are formed. The tree is reverenced by Hindús of all classes and is hardly ever cut down by them. Even when blown down it is often allowed to lie where it fell. Camel drivers, both Hindu and Muhammadan, however, lop it mercilessly as fodder for their animals and the bare branches often mark the route taken by a large camp. The people would prevent this if they could, but fearing the wrath of the employer, who indeed would often gladly interfere to prevent the sacrilege, allow it to proceed. There are few wells too which are not shaded by a *pipal* or *bor* tree (*ficus indica*) planted to the south of where the oxen work or stand at the troughs. The *bor* escapes being lopped for fodder as camels are not fond of it. Round the wells, or edging the lanes leading up to them, are also found the *drek* (*azadirachta melia*), the *tut* or mulberry (*morus laevigata*), the Persian lilac or *bokain* (*melia sempervirens*) and the scented *acacia farnesiana*. The *dier* (*zizyphus jujuba*) is very common too in these lanes, or in clumps along the edges of the fields watered by the wells. It often marks the better kinds of soil and is valued for its fruit and for roofing purposes, being, to some extent, proof against the ravages of white ants. It is also a favourite tree near Muhammadan shrines. The dwarf variety is found all over the district, and where found is a sign of the absence of *kalar*. It is cut down to form cattle enclosures, or to fence fields of sugarcane. The *kikar* (*acacia arabica*) is ubiquitous and is the main timber tree of the cultivator, for the wood is hard and being close grained withstands water. This tree will grow in almost any soil, even in saline soils where no other tree will live. On waste lands are found the *jand* (*prosopis spicigera*) though this is rapidly disappearing, the *karil* (*caparisaphylla*) whose berries are gathered for pickles, the *phulá* (*acacia modesta*), the *reru* (*acacia leucophlora*) and the *dhák* or *chichera* (*butea frondosa*). The last is met with most on clay lands, the *ber* on lighter and sweeter soil. The scarlet flowers of the *chichera* are used as a dye, the leaves as wrappers for sweetmeats and curds, the juice as a gum, and the wood is in request as fuel. Buffaloes too will graze on the leaves. It used to be common on the upland tracts of Ajnála, but is rapidly becoming rarer. The *tálí* (*dalbergia sissu*) is a useful timber tree, but is not indigenous, except in the Ajnála *bet* lands, where it is planted in groves. It is the commonest of the trees planted on the roadsides and along the canal where it grows to a considerable height, but, save in Ajnalá, the cultivator rarely plants it. The *phárwán* (*tamarix orientalis*) is grown much less than it might be, as it is easily planted from shoots in trenches, will grow quickly in sandy soil and gives a very fair shade. The *sirín* (*albizzia speciosa*) was at one time used a good deal as a roadside tree, but is useless for timber, and suffers from the ravages of camel drivers and goatherds.

Trees.

Other trees are found in the orchards round towns which are rarely met with out in the villages. Such are the mango, *loquát* and *jáman*, all of which are grown for their fruit. Peach and pear orchards, and groves of sweet and bitter limes are common round the city, while among the rarer ornamental trees may be noticed the *tun*, the *ním*, the willow, the horse radish tree or *sohánjna*, and the Indian laburnum or *amaltás*. Each of the four main branches of the canal, which passes through the district, has been planted with trees along the banks, and extensive nurseries are maintained. The Grand Trunk road has, at many points, a double row of trees, which make the side walks shady at all hours of the day, and the District Board has not been behind hand in planting avenues along the main lines of road within its charge. In particular the roads from Amritsar to Ajnála and Tarn Táran and the road from Atári to Ajnála, have been well planted and cared for.

Grasses.

Along the Rávi, on the tracts of shallow soil which are not worth breaking up, the *sar* grass (*saccharum sara*) is commonly met with and is used by the agriculturists in many different ways, as fodder, for blinds, ropes, winnowing baskets, mats, thatch, etc. The smaller variety known as *káhi* is useful in some of these ways too, and so is the *pilchi* (*tamaxix dioica*) which is found on both rivers, but most on the Rávi. The commonest grasses are the *dub*, a sweet fodder grass found on good lands (along with the dwarf *ber* or *malle*) the *dab*, a coarse grass, which infests poor sandy soils, and on which only buffaloes will feed, the *chimbal* and the *palwan*. *Markana* is a coarse short grass, which, after heavy winter rains, grows in profusion on *kalar* lands, and may be recognized by the way it crackles when trodden on. It comes in useful as food for the poorer classes in times of scarcity. The commonest weeds are the *saroch*, the *bughát* or leek weed, which infests the fields of young wheat, absorbing much of the moisture, the thistle or *poli* and two kinds of wild convovlulus. The *ak* bush, or milk plant, is everywhere met with, especially in the Beás valley, and in waste and sandy lands. On the sand ridge it is very common, and is there allowed to grow at the corners of fields to mark the limits, for the field divisions are apt to be levelled by the wind. As fodder it can only be stomached by goats, the acrid juice acting as a poisonous irritant to other animals.

Geology.

The whole soil consisting of alluvial clay and loam, the only mineral product of value is the peculiar calcareous concrete known as *kankar*. It is found in beds generally at a slight depth below the surface whence it is excavated to form material for road making. The presence of this concrete is of considerable importance in a district where stone road-metal is not procurable unless imported, and which contains a considerable length of the Grand Trunk road and North-Western railway, besides State canals. The *kankar* is also much used for lime. No limestone is found in the district, and stone lime has to be fetched from Pathánkot, Khushâb and other distant places.

CHAP. I. A. Physical Aspects.

The best *kankar* beds are found in Ajnála on the left bank of the Sakki, from Kariál downwards, and between Kaler and Vadála Bhittewad. Good *kankar* is also found to right and left of the Grand Trunk road near Jandiála and at Virpal. In Tarn Táran it is met with at Bala Chak and Gohlwár. At the recent re-assessment *kankar* was not treated as an asset. But in the administration paper of every village, a clause has been inserted, declaring that the *kankar* is the property of Government and may be dug for by Government when required without the payment of any royalty to the owners of the land. The owners however have liberty to dig for and use the *kankar* when it is not required by Government. It is said that saltpetre used to be manufactured in the Sikh times in the Ajnála tahsil where *kalar* wastes abound, but it is hardly ever made now. The *kalar* efflorescence is scraped up by was hermen to be used in place of soda as a cleansing agent, but is not otherwise useful. Coarse pottery clay, white, grey and black, are dug for by potters, who use them in their trade and distinguish between the different varieties, but these call for no particular remark.

Wild animals. Sport.

Game is scarce in Amritsar. *Nilgai* are never now met with. An occasional black buck may be seen in the wide treeless plains between Sheron and Sathiála, or beyond Naushera Pannuán, but the absence of waste, spread of canal irrigation, and the constant presence of the cultivator, will soon cause their disappearance. Occasionally rakh Bohôrú harbours a black buck or a *chikara* which has found its way from Kasúr. Wild hog are fairly numerous in rakh Nág, but nowhere else. Sometimes they wander down the canal banks from rakh Nág, or up the Rávi from the Shahdara plantations near Lahore, but there is no cover to induce them to stay. Hares are fairly numerous, especially where sugarcane is much grown, and their tracks may often be seen crossing and recrossing the newly smoothed fields of young wheat.

Wild geese are found on both the rivers in large flocks in the winter, and come inland at night to feed on the new sown wheat. They may be seen in the *chhambhs* of Ajnála, and at Vadála Viram if the rains have been plentiful. Mallard, teal, widgeon, pochard, and pintail ducks may be seen all over the district wherever there is enough standing water in a rainy winter, and they are often netted at Bhalapind, Vadála Viram and Jastarwál when they come in from the rivers. Black partridges are rare, and so are grey partridges, and there are few places where a bag of snipe may be made. The common crane is common in the early winter, the demoiselle crane is however hardly ever seen. The black curlew is to be met with inland, and the more wary jack-curlew on the sandy stretches of the Beás valley. Quail come in, as elsewhere, in April and September and are much netted near the city, while sandgrouse of the two common varieties may always be seen on the *moth* stubbles of

CHAP. I. A
Physical Aspects.

the Jandiála sand ridge, and on the sandier parts of the Ajnála Uthar near Chamiári. Obára are rarely met with. Green pigeon frequent the *pipal* trees and canal plantations, but not in large numbers. The blue rock pigeon is much more common, and there are many in the cliffs overlooking the Beás.

Fish.

The Beas used to be famous for its *mahasir* fishing and eighteen or twenty years ago it was not uncommon for sportsman to land several fish of over 30 lb. weight in a day. But unchecked poaching with nets during the last two decades has caused a serious diminution of the supply. The large muddy-fleshed *rohu* is caught in both the Beas and Ravi, and is netted by Indian fishermen for sale. In most river villages a few individuals make a livelihood by fishing.

Snakes.

The only venomous snakes which are met with are the cobra, the karait, the Russell's viper and the small keel-scaled viper (*Echis carinata*). Of these the *echis* is the most common, and perhaps the karait the next. The *kallar* wastes of Ajnála are notorious for harbouring venomous snakes. The canal contains many fresh water snakes but they are all harmless. Wolves are now scarcely ever seen except near the reserved forests and in one or two places on the banks of the Beas. Jackals are common everywhere.

Climate.

The climate of the district, owing to the comparative proximity of the hills, the prevalence of canal irrigation, and consequent increase in cultivation and growth of timber is more temperate during the hot months from May to September than that of many parts of the Punjab; certainly the difference between Amritsar and districts like Ferozepore and Multan is marked. The hot weather may be said to end with September, and thereafter the air becomes drier and cooler every day. Hoar frost is common in January and February, and perhaps on three or four nights in the year the temperature falls below 32° Fahrenheit. High winds are common in March and April and are frequently accompanied by hailstorms. Dust storms, often of great violence, occur in the end of May and June. The mean temperatures for each month are exhibited in Table No. 2 of Part B.

Rainfall.

The district is usually reckoned as submontane, the northern boundary being about 60 miles from Pathankot, which is at the foot of the hills, and about 110 miles from the hill station of Dalhousie. The rainfall is thus very fairly certain. The annual amount for the past elven years, as recorded at eight observing stations, is shown in Table No. 3. The heaviest fall was in the year 1908-09, when nearly 47 inches were recorded at the Amritsar jail, and the dryest years of the series were 1904-05 and 1906-07, in each of which the total fall amounted to only about 13 inches. On the average of the twenty years covered by the Settlement that has recently expired, the annual rainfall of

CHAP. I, B.
History.
Rainfall.

each tahsíl is as follows :—Tarn Táran $22\frac{1}{2}$ inches, Amritsar and Ajnála $23\frac{1}{2}$ inches. But it is a curious feature of the returns that during the last three years the heaviest falls have been recorded at Tarn Táran, the most southerly of the three tahsíls, and the lightest at Ajnála, which is closest to the hills. Possibly this is the effect on the climate of the extension of canal irrigation, which now penetrates into every corner of Tarn Táran, and the consequent increase in the growth of trees. In the other two tahsíls canal irrigation is restricted to certain localities.

The monthly distribution of the rainfall is exhibited in Statement No. 4. Of the annual total of about 23 or 24 inches from four-fifths to five-sixths may be looked for in the half year ending in September, and the remainder during the winter season. The spring harvest, in most villages, occupies double the area taken up by the autumn harvest, and it is therefore of the first importance that there should be a good fall in late autumn, to prepare the ground for ploughing and so enable the wheat and gram to be sown at the proper time, and that the winter rains should be timely and sufficient. A typical season for the cultivator would be one in which two inches of rain fell in late September or early October, followed by dry weather up to Christmas, when a couple of inches would give the wheat a good start. The same after an interval of not less than a month in January, followed by one inch in February, or early March, would ensure the success of the spring crops. Thereafter but little rain is required until the end of June, when the monsoon rains should burst with a fall of two or three inches. Five inches in July with alternate breaks of open weather and six inches in August well distributed, would be as much as the crops dependent on rain would need. But the cultivator's constant complaint is that he does not get rain at the time or in the quantity he would like it.

Section B.—History.

Architectural objects and remains.

There are no architectural remains in the Amritsar District of any great interest. The city of Amritsar is comparatively modern, and the same may be said of Tarn Táran and Jandiála. The only relics of Muhammadan rule which need be mentioned are the remains of the imperial *caravanserais* at Serái Amanat Khan, Nurdín, Naurangabád, and Fatehábad, in the Tarn Táran tahsíl. These were built on the old road from Lahore to Delhi, which entered the district near Atári, and ran past the villages named above, crossing the Beás near Goindwál. Little is left of the seráis but the gateways, and these are fast falling into ruins. The space inside the seráis has been occupied by the houses of the agriculturist and the shops of the village traders, and besides the gateways, over which in some cases blue enamelled tiles have been let into the masonry, the

more or less ruined walls of the seráis are still standing. A few of the pillars, or *kos minars*, which marked the course of the road are also still to be seen at intervals. Round Serái Amánat Khan and Fatehábad are the ruins of old Muhammadan tombs of the usual type. At Lálla Afghanan in Ajnála, and at Bagga in the Amritsar tahsíl, are two large mounds, or *thehs*, which mark the site of towns of some size. Some years ago an enterprising Pársi merchant began to excavate the mound at the first named village, and is said to have come upon some old carvings, but he gave up the undertaking as unprofitable. The other was used for a time by a contractor as a quarry for ballast for the Pathankot Railway, but he was stopped from doing so by the villagers, when they found the stuff was marketable.

CHAP. I. B.

History.

Architectural objects and remains.

Important buildings.

The chief objects of architectural interest are the Sikh temples at Amritsar, Tarn Táran, Khadúr Sáhib, Goindwál and Ramdás, but no one of these is as much as 300 years old, and they derive their interest more from their associations, and the reverence in which they are held, than from any beauty of construction. They will be mentioned more in detail further on. Here it need only be said that the temple or Dárbar Sáhib at Amritsar stands in the centre of a large tank surrounded by flights of steps and by a marble-paved causeway, from the west side of which a passage also paved with marble leads out across the water to the temple. This is profusely gilt over copper outside and beautifully decorated with paint and mosaic inside. The tank at Tarn Táran presents much the same appearance, but there the temple, also bright with gilding, stands, on the edge of the water instead of in the centre. Like that at Amritsar it is quite a small building, and over it stands a *minar* or campanile of masonry work which is visible on a clear day ten miles away. The other temples named have no noteworthy surroundings and are crowded in by houses and shops. They have hardly any of the expensive gilding, which is the chief feature of the shrines at Amritsar and Tarn Táran, and the interior decoration is on a much smaller scale. The only other buildings that need be mentioned are the tower of Bába Atal, built over the tomb of the son of Hargobind the sixth Guru, close to the Amritsar Dárbar Sáhib, and the fort of Govindgarh, just outside the city walls, which was built by Mahárája Ranjít Singh in 1809 A. D.

Early history.

The interest of the history of this portion of the Punjab, the fertile central Doábs, commences with the rise of the Sikh religion and power. There is no mention of any important city like Sirhind, or seat of Government like Lahore, as having existed in what is now the Amritsar District, in the days of ancient Hindú sovereignty. It was probably under the rule of the Kings of Lahore, and was a purely agricultural tract, peopled by the progenitors of the Jats, the peasant proprietors of to-day.

CHAP. I. B.
History.
Origin of the Jat tribe.

The real origin of the Jat is a point which is always likely to remain in dispute. One authority, General Cunningham, maintains that the two tribes of Jats and Meds were the first Indo-Scythian conquerors of this part of Hindústán, and that towards the end of the second century before Christ they immigrated from the country south of the Oxus, at some time later than the Macedonian invasion, the historians of which do not mention them as being found in the Punjab. He professes to have found proof of their having both been firmly established in Sind and the Indus valley, where the Meds migrated from the Upper Punjab, the tract which they first occupied. Thereafter they again spread over the Punjab. Other authorities look upon the Jats as having had their origin in Jesalmír and Rájpútàna and to have gradually occupied the Punjab from that direction. The matter is one of purely antiquarian interest and need not further be alluded to here. The commonest tradition among the people themselves is that they are of Rájpút origin and came from the east rather than from the west.

Muhammadan period.

However this may be, it was in 1023 A.D. that Sultán Mahmúd permanently established the Muhammadan power in Lahore and the Punjab. From that time, until the final overthrow by the Sikhs of the Muhammadan supremacy, the Amritsar district was attached to the *suba* or province of Lahore and was ruled by the Moghal Governor whose headquarters were at that city. The district lies on the road usually taken by the invading Muhammadan armies, and was thus liable to be plundered and devastated at each incursion, but, as it does not appear to have then contained cities famous for their wealth, it is possible that it may have been looted and laid waste to a less extent than its neighbours, the invaders preferring to push on to Sirhind and Delhi after leaving Lahore. This may partly account for the comparative absence of the extensive mounds or *thehs* marking the sites of deserted villages, which are so often met with in districts to the west of Amritsar.

The rise of the Sikhs, and appearance of the Gúrùs.

From the eleventh to the end of the fifteenth century, then, there is nothing to call for special notice in the history of this part of the central tract of the Punjab. It was shortly after the middle of the fifteenth c entury that Nának, the first Gúru, the founder of the Sikh religion, was born at the village of Talwandi in the Lahore District. His father is said to have been a small trader of the Khatri caste. Nának himself early took to the life of a devotee, and travelled over the most of India, but his history is in no way specially connected with that of the Amritsar district. He died in a village of the Gurdáspur district near to that which now bears his name, in the year 1539, leaving behind him the writings which contain the exposition of the faith of the Sikhs, and a numerous band of disciples. Nának was no more than a religious reformer. He does not appear to have claimed for himself any special divinity or

CHAP. I. B.

History.

The rise of the Sikhs, and appearance of the Gúrús,

for his writings direct inspiration. As noticed by Cunningham in his history of the Sikhs, Nának's reforms were in their immediate effect religious and moral only, and it is not probable that he possessed any clear views of social amelioration or political advancement. His name is perhaps most closely associated with Vairowál and Ramdás than with other villages in Amritsar. From the former came several of Gúru Nának's disciples, and the temple at Ramdás was founded by Sáhib Buddha, one of his immediate followers. The second Gúru was Angad, the most trusted disciple of Nának, who on Nának's death was acknowledged by the Sikhs as the teacher of the new faith. As such he continued until his death, in 1552, at Khadúr Sáhib, a large village in the south of the Tarn Táran tahsíl, where there is a temple and a tank sacred to his memory, supported by a *jagír* from Government. Little is known of his ministry, and on his death his mantle descended to Amr Dás, one of the most devoted of his followers. Amr Dás is chiefly remarkable for having separated his disciples from the Udási sect founded by the son of Gúru Nának, most of whom at the present time are ascetics, pure and simple. The name of Amr Dás is connected with the village of Goindwál, close to Khadúr Sáhib in Tarn Táran, where he lived and died. Here there is a temple usually known by the name of the Baoli Sáhib. There being no space available for a tank its place is taken by a Báoli or well connected with the upper ground by a flight of steps, which has given its name to the temple. To him succeeded Ramdás, the fourth Gúru, who obtained from the Emperor Akbar the grant of a piece of land, where now stands the city of Amritsar. Here he began to excavate the tank and to build the temple in its midst. But he did not live to see it finished, dying seven years after he succeeded his father-in-law. Next came Gúru Arjan. He is said to have made Amritsar the head-quarters of his following, though at first he established himself at Tarn Táran. He completed the digging of the tank, and a new city began to grow up round the sacred pool. Gúru Arjan was more of an administrator than his predecessors. They had been content to wander about the country with a small band of disciples, preaching what of the doctrines of Nának they happened to understand, but doing little towards the founding of a national religion. Of Gúru Arjan it is said that he collected and arranged the writings of his predecessors, reduced to a systematic tax the customary offerings of his adherents, and appointed agents to collect these offerings wherever his followers were to be found. His predecessors had merely been devotees, but Gúru Arjan, according to Cunningham, who quotes what he states to be the ordinary Sikh accounts, encouraged his disciples to visit foreign countries and combine business with religion. He was himself a man of name and wealth, and is said to have ventured to insult Chanda Shah, a high official of the Suba of Lahore. For this and certain acts of political partizanship, he was thrown into prison by the Emperor Jehángír, as a man of dangerous ambition, and this confine-

CHAP. I. B. History.

ment is said to have hastened his death, which occurred in A.D. 1606.

Gúru Hargovind and his successors.

But he left his following very different from what he found it. Belief in the principles expounded by Nának had been growing rapidly under his direction, and under that of his son, Hargovind, the sixth Gúru. The teaching of Gúru Arjan had borne fruit, and the combination of secular with spiritual occupations had done much to popularize the faith. Hargovind went further and became a military leader as well as a spiritual teacher. He had his father's death to avenge, and it is this which apparently prompted him in the line he took, and necessitated his keeping up a numerous band of armed and mounted followers ready for any service. To quote again from Cunningham, "the impulse which Gúru "Hargovind gave to the Sikhs, was such as to separate them a "long way from all Hindú sects and now the disciples were in "little danger of relapsing into the limited merit or inutility of "monks or mendicants." Though nominally in the employ of the Muhammadan Emperor, Hargovind's independence soon embroiled him with the authorities at Lahore. He is heard of as in prison at Gwalior, engaging the Imperial troops in fight near Amritsar and accompanying the Imperial camp with his followers to Kashmír. He died in A. D. 1645, and after him came Har Rái and then Har Kishen, both of whom are connected more with the Lahore District than with Amritsar. The ninth Gúru was Tegh Bahádur who, with many of Hargovind's followers, had taken up his abode at Bába Bokála, in the Amritsar tahsíl, but not far from Khádur Sáhib and Goindwál. Eleven years afterwards Tegh Bahádur who, like his father Hargovind, was more of a martial leader than a religious reformer, was put to death as a rebel at Delhi by the Emperor Aurangzeb. He left a son, then aged fifteen years, who became the tenth or last of the Gúrús, under the name of Govind Singh. He for many years remained in obscurity, from which he emerged the acknowledged leader of the Sikhs, declaring that he had a double mission to perform, to avenge the death of his father, and to free his people from the oppressive bigotry of the Muhammadan rule under the Emperor Aurangzeb. It is at this time that the Sikh community first took to itself the distinctive name of the Khálsa, the liberated or the chosen, people. The Gúru preached that they must surrender themselves wholly to their faith, and to him as their guide, and it was he who prescribed the *pahal*, or simple initiatory ceremony, now performed by all Sikhs on taking up the faith. He taught them the hatred of idolatry which has also distinguished the orthodox Sikhs, and that adoration was alone permitted in the case of the sacred book, and to his teaching is due the practice of wearing the hair unshorn, the taking of the surname Singh, and the use of ornaments of steel. But so long as the power of the Emperor Aurangzeb remained unbroken, the Gúru could do little towards the fulfilment of his mission. A force was

CHAP. I. B.
History.

Gúru Hargovind and his successors

sent against him which dispersed his followers and compelled him to fly from Anandpur (in the Hoshiárpur District) where he had established himself, to the wastes of Bhatinda. But his opportunity came on the death of Aurangzeb in A. D. 1707. Govind Singh assemble his forces, and marched again towards the Sutlej, during the disturbed times which succeeded the Emperor's death, and might have done much to establish the name of the Khálsa, but he was assassinated in the following year 1708 A. D. at Naderh on the banks of the Godaverí.

Situation of the Sikhs after the death of the tenth Gúru.

He was succeeded by the Bairági Banda, his favourite disciple, round whom the Sikhs again gathered. Banda established himself at Gurdáspur, and for a time held his own against the Muhammadan forces, but was finally overcome by Abdul Samand Khan, the Governor of Kashmír, and being taken prisoner, was tortured and put to death at Delhi in the year 1716 A. D.

The situation of the Sikhs at the death of the fanatic Banda is thus summed up by Cunningham : "After the death of Banda "an active persecution was kept up against the Sikhs whose losses "in battle had been great and depressing. All who could be seized "had to suffer death or to renounce their faith. A price indeed "was put upon their heads, and so vigorously were the measures "of prudence, or of vengeance, followed up, that many conform- "ed to Hindúism; others abandoned the outward sign of their "belief, and the more sincere had to seek a refuge among the "recesses of the hills or in the woods to the south of the Sutlej. "The Sikhs were scrarcely again heard of in history for the period "of a generation.

"Thus, at the end of two centuries, had the Sikh faith be- "come established as a prevailing sentiment, and guiding prin- "ciple, to work its way in the world. Nának disengaged his "little society of worshippers from Hindú idolatry and Muham- "madan superstition, and placed them free on a broad basis of "religious and moral purity. Amr Dás preserved the infant "community from declining into a sect of quietists or ascetics; "Arjan gave his increasing followers a written rule of conduct "and a civil organization ; Hargovind added the use of arms "and a military system ; and Govind Singh bestowed upon them "a distinct political existence and inspired them with the desire "of being socially free and nationally independent."

Duráni invasions.

In 1737 Báji Rao, the Mahratta Peshwa, appeared in arms before Delhi, and two years later came the invasion of the Punjab by Nádir Shah. The Sikhs seized the opportunity of their hereditary enemies being in difficulties, and, collecting in small bands, plundered the stragglers of the Persian army and the wealthy inhabitants of the larger towns. But they had no recognized leader, and, when the invaders had retired, the Sikhs were easily put down by Zakariya Khan, the Viceroy of Lahore,

CHAP. I, B.
History.
Duráni invasions.

But now they began to visit Amritsar openly, instead of in secrecy and disguise, to make their devotions at the temple. Nádir Shah was assassinated in A. D. 1747, and his place was taken by Ahmad Shah Abdáli, who in the same year entered the Punjab at the head of an army and put to flight the new Governor of Lahore, Shahnawáz Khan. But he got no further than Sirhind and was forced to retire, and Mír Manu assumed the Viceroyalty at Lahore. The Sikhs who had thrown up a fort at Amritsar, which they called Rám Rauni, at once began to give him trouble. But they were suppressed without difficulty and their fort was taken. Then followed the second invasion of Ahmad Shah, which was again the signal for a rising of the Sikhs, who possessed themselves of the country round Amritsar only to be defeated again by Adína Beg, who was acting under the orders of the Governor Mír Manu. At this time we hear of Sikh leaders coming into prominence, among them Jassa Singh, Kalál, and Jassa Singh, carpenter, who restored the Rám Rauni at Amritsar. It was again however demolished by Prince Timur, who was sent from Delhi to disperse the insurgent Sikhs, the buildings were levelled to the ground and thrown into the sacred tank. This last insult inspired the Sikhs to fresh exertions, and gathering under Jassa Singh, Kalál, they attacked and took Lahore. The Muhammadans called in the aid of the Mahrattás, the Afghán garrison left by Ahmad Shah were driven out, and the Sikhs evacuated Lahore. A period of anarchy followed, leading to the return of Ahmad Shah, and the total overthrow of the Mahratta power in Northern India at Pánipat in A.D. 1761. Lahore remained in possession of the Afgháns, for the Delhi dynasty was on the wane, but they had to settle with the Sikhs, who continued in revolt against whatever was the constituted Government. Some successes were gained by the Sikhs, and the army of the Khálsa assembled at Amritsar, and again performed their ablutions at the sacred pool. But a disaster greater than any they had experienced since the overthrow of Banda was at hand. Ahmad Shah returned to the support of his lieutenants, and in 1762, overtaking the Sikhs at Ludhiána, utterly defeated them in an action which is still referred to as the *gulu ghala* or the great defeat. On his way back, Ahmad Shah passed by Amritsar, where he razed the restored temple to the ground, and polluted the sacred pool by the slaughter of kine.

Partition of territory among Sikh confederacies.

But this was the last occasion on which the temple was interfered with. It was again re-built in 1764 and year by year the Khálsa, gaining strength, met at the sacred tank at the festival of the Dewáli. The Sikhs now began to be divided among themselves, and broke up into rival confederacies or *misls*, several of which had their head-quarters in the Amritsar District and drew their forces from the hardy Jat peasantry, which during the troubled times of the first half of the eighteenth century, had held their own in the

CHAP. I. B.
History.

Partition of territory among Sikh confederacies.

district. The *misls* chiefly connected with Amritsar were the Banghis, the Ramgharias, the Ahluwalias and the Kanhayas. Of these the Banghis were the first to rise into prominent notice. Their country extended north from their strongholds at Lahore and Amritsar, to the river Jhelum and then down its banks. The Kanhayas were supreme between Amritsar and the hills and the Ahluwalias in the Jullandur *Doab*, whence they often spread into the *Manjha*, as the country now comprised in the Tarn Taran and Kasur tahsils came to be called. The Ramgharias held part of the plains lying to the south of the Sutlej and were also powerful in part of the Gurdaspur District. They took their name from the fort of Ram Rauni, already mentioned as having been established to guard the sacred temple at Amritsar, and which was re-named Ramgarh or the fort of God, by Jassa Singh, the carpenter. To this day the Sikh carpenter loves to describe himself, not as a *tarkhan*, but as a Ramgarhia, and, though they form a distinct caste, they possess all the good qualities and martial spirit of the Sikh Jats. Mention must also be made of the Akalis, a band of warlike fanatics who constituted themselves the armed guardians of the Amritsar temple, and devoted their spare time to plundering their weaker neighbours with much impartiality. They adopted arms as their profession, and, subsequently under Maharaja Ranjit Singh, they formed a prominent part of the Sikh army, though well known for their unruly character and impatience of control.

Rise of Mahárája Ranjít Singh.

It would be tedious to trace in detail the fortunes of the different *misls*, nor have their rise and fall any special connection with the history of Amritsar. The power of the Bhangis under Jhanda Singh soon received a check from the Kanhayas led by Jai Singh, and their allies, the Sukar Chakias, whose chief was Charat Singh, grandfather of the great Maharaja. But they still held Lahore and Amritsar, and after this are heard of more in the direction of Multan than elsewhere. Next the Kanhayas and the Ahluwalias combined, and forced the Ramgarhiás to retire from their possessions near the Sutlej and retreat towards Hissar. Maha Singh had by this time taken the lead of the Sukar Chakias, and was taken under the protection of Jai Singh, Kanhaya, but shortly separated from them and allied himself with the Ramgarhiás with whose help he defeated the Kanhayas. Thereon the Ramgarhias regained their possessions along the Sutlej. We next hear of a second alliance between the Kanhayas and the Sukar Chakias, this time of a more lasting character. Maha Singh was dead, but had been succeeded by his son Ranjit Singh, who cemented the alliance by marrying the daughter of Mai Sada Kour, the widowed daughter-in-law of Jai Singh, Kanhaya. This union laid the foundation of the power of Ranjit Singh, for the Kanhayas, under the able leadership of Mai Sada Kour, were the most powerful confederacy of that time. In 1801 he seized Lahore from the Bhangis, who had then no leader of any note and made it his capital. He strengthened his position by a friendly

CHAP. I, B. History. Rise of Maháraja Ranjít Singh.

alliance with Fatteh Singh, Ahluwalia, whom he met at Tarn Taran, and with whom he exchanged turbans in token of eternal friendship. He then forced the Bhangis to retire from Amritsar, and, step by step, overcoming all opposition from the remnants of the other *misls*, gradually established the kingdom of Lahore.

The condition of the central districts under Sikh rule.

Amritsar was the place where Ranjit Singh met Mr. Metcalfe, in 1809, and where he signed the treaty by which he was acknowledged by the British as the ruler of those provinces which he held at the time cis-Sutlej, and undertook on his part not to extend his dominions further in the direction of the protected cis-Sutlej States. In this treaty we find him styled the Raja of Lahore. In the same year he completed the building of a fort at Amritsar, which was named Gobindgarh. From this time forward he gradually consolidated his power, and made himself absolute in the Punjab. In the words of Cunningham, Ranjit Singh "took from the land as much "as it could readily yield, and he took from merchants as much as "they could profitably give; he put down open marauding; the "Sikh peasantry enjoyed a light assessment; no local officer dared "to oppress a member of the Khalsa; and if elsewhere the farmers "of the revenue were resisted in their tyrannical proceedings, they "were more likely to be changed than to be supported by battalions." The above description is only partly true. According to our ideas the assessment was by no means light. But it was often paid in kind and doubtless there were ways of evading the exactions of the farmers of revenue from time to time. And there were drawbacks in the shape of *inams* by which the headmen often benefitted.

Sir Denzil Ibbetson, in his Census Report of 1881, gave a somewhat different version from Cunningham, regarding the Sikh rule in the central districts of the province. He writes: "In the centre and south-west the Sikh rule was stronger and "more equitable. In the earlier days, indeed, previous to, and "during, the growth of the *misls*, it was nothing better than an "organized system of massacre and pillage. But, as the Sikhs grew "into a people and a national spirit developed, self-interest, if "nothing higher, prompted a more moderate government. Still the "Sikh population were soldiers almost to a man, and their one "object was to wring from the Hindu and Muhammadan cultiva"tors the utmost farthing that could be extorted, without compell"ing them to abandon their fields. The Rájpút, especially, who had "refused to join the ranks of an organization in which his high "caste was disregarded, was the peculiar object of their hatred "and oppression. Not to be for them was to be against them, and "all who had any pretensions to wealth and influence were "mercilessly crushed. They promoted and extended cultivation, as "far as was possible, under a system which held forth the minimum "of inducement to the cultivator, but they acknowledged nothing "higher than the husbandman, they respected no rights and they "recognized no property where such respect or such recognition

CHAP. I, B.
History.

The condition of the central districts under Sikh rule.

" conflicted with their pecuniary interest, and he who was not a " Sikh, and therefore a soldier, was only valuable in so far as he " could be utilized as a payer of revenue. "

The district was divided into *taluqas* each with its separate Governor or *Kardar* who paid a fixed amount into the Treasury at Lahore and took from the people as much as he safely could.

Sub-divisions of Amritsar under the Sikhs.

The original *taluqas* were as follows :—

Pargana (or Tahsil) Amritsar.

Jandiála, Batála, Sathiála, Bundála and Mahtábkot—Comprise all the southern half of the tahsil. Were acquired and held by the Ahluwália Sardárs Jassa Singh and Fatteh Singh, Mahárája Ranjit Singh seized the tract about the year Sambat 1882.

Mattewal—On the Gurdaspur border was held by the Ramgarhia Sardars and escheated to the Maharájá in 1872 Sambat.

Chawinda.—A part of the Kanhaya estate ; seized by the Maharája from Mái Sada Kour and granted to Prince Sher Singh in jagír.

Majitha—Belonged to Sardár Diál Singh, Gil.

Amritsar—Originally belonged to the Sardars of different clans, the Bhangí, the Ramgarhiá, the Kanhaya, and the Saurianwálá; from them the Maharájá gradually seized the tract about 1809.

Gilwali—Formed part of the estate of the Kanhaya Sardárs. Was held in jagír by the brother's son of Mái Sada Kour, Sardár Gurdit Singh.

Pargana (or Tahsil) Tarn Táran.

Jalalábad, Vairowál, Kot Mahmud Khan—Belonged to the Ahluwália Sardárs in the same way as *taluqa* Jandiála above. Were managed under the Maharájá by Sardár Lehna Singh, Majíthia, and Misr Sáhib Dial.

Sirháli—Also managed by Sardar Lehna Singh under the Maharája.

Tarn Táran—Belonged to the Bhangís, afterwards to the Khanwála Sardars Dal Singh and Fatteh Singh.

Khapar Kheri—Belonged to the Singhpuria Sardárs. Now partly included in tahsil Amritsar.

Pargana Saurián (now Tahsil Ajnála).

Saurian, Jagdeo—Belonged to Sardár Jodh Singh of Saurián. Taken by Mahárája Ranjit Singh in 1891 Sambat.

Chhina—Belonged to Sardar Karm Singh of Chhina, whose family still holds a jágír in this vicinity.

CHAP. I. B.
History.
Sub-divisions of Amritsar under the Sikhs.

Sainsra—Originally belonged to Sardár Dewán Singh of Sainsra. Afterwards received in jágír by the Sindhánwália Sardárs from Mahárája Ranjit Singh.

Thoba—Formed part of the estate of the Kanhaya Sardárs' and was included in the *ilaqua* of Chattargarh.

Panjgrain.—A part of the Kanhaya estate ; afterwards came into the possession of the Sindhanwalia Sardars.

Chamiari—Was seized by Nar Singh of Chamiari, whose descendants still hold a jágír there.

Ghonewála—Originally belonged to Sardár Jodh Singh Sauriánwála, and afterwards came into the possession of Sardar Nar Singh of Chamiari.

Kárial—Part of the possession of Sardar Jodh Singh of Saurian.

Amritsar from the death of the Mahárája Ranjít Singh up to annexation by the British.

During the reign of Maharaja Ranjit Singh, the city of Amritsar increased in importance, and took its place as the religious capital of the Sikhs, and was frequently visited by the Mahárája. It was there that he received the Governor-General, Lord Auckland, before the first Afghan war. Many of the leading men at the Court of Lahore were intimately connected with the district, such as Sardár Lehna Singh of Majithia, the Sindhanwalia chiefs (who belonged to the same family as the Mahárája) and Sardar Sham Singh of Atári, whose daughter was in 1837 married to the grandson of the Maharaja. Ranjit Singh died on the 27th June 1839 and was succeeded by his son Mahárája Kharak Singh, who died in the following year. Then followed the short reign of Nao Nihál Singh, and the succession of Sher Singh, who again was murdered in 1843, when the young Prince Dhalíp Singh took his place and was proclaimed Mahárája. None of the events of the first Sikh war took place in Amritsar, the scene of them being entirely on the left bank of the Sutlej. Thereafter the British troops crossed the Sutlej and occupied Lahore withdrawing in March 1846, when arrangements for the Government of the country had been made, and the treaties signed. It was agreed that there should be perpetual peace and friendship between the British Government on the one part, and Mahárája Dhalip Singh on the other. The Jullundur Doab was ceded by the Lahore Darbar to the British and the greater part of the troops withdrew from the Bari Doab, leaving only sufficient to act as a guard to the Resident appointed to the Court at Lahore, and for the protection of the Maharaja. Of the eight members of the Council of Regency three were drawn from the most powerful families of the Amritsar district, the Sindhánwália, Majíthia and Atariwala. A fourth was Sardar Atar Singh of Kála, a village just outside Amritsar city. Peace lasted till 1848, when the Sikh rebellion, headed by two of the Sardars of Atári, took place, the chief result of which was that the Governor-General found himself forced to annex the rest of the Punjab.

CHAP. I. B.
History.
Formation of the district and alterations in limits.

From the beginning of 1849 dates the existence of Amritsar as a district. Mr. L. Saunders took charge in April of that year, as Deputy Commissioner. As at first formed, the district contained four tahsils, Amritsar, Tarn Táran, Ajnála and Raya (or Nárowal). The last, which is separated by the river Rávi from the rest of Amritsar, was transferred to the Siálkot District in 1867. At the same time the Bátala tahsil was added to the Amritsar District from Gurdáspur, but the arrangement was found to be inconvenient, and was objected to by the people. It was restored to Gurdáspur in 1869, or two years later.

The boundaries of the three remaining tahsíls have not always been as they now are. Up to 1854 the villages immediately surrounding Atári were included in the Lahore District, and they were only added to Amritsar during the first regular settlement of 1852. The south of what is now the Amritsar tahsíl, corresponding roughly with the Sikh *taluqas* of Sathiala and Batala belonged to Tarn Táran, while at the north end of the tahsil there are groups of villages, now counted as in Ajnala and Tárn Táran which up to 1854 were included in Amritsar. To straighten the tahsíl boundaries, which were very straggling and inconvenient, and to bring all the Grand Trunk Road below Amritsar city into the Amritsar tahsíl, various transfers of villages were made, but these were all made before 1854, and since that date the limits of the three tahsíls which now form the district have remained the same. From 1849 to 1859 the district formed part of the Division controlled by the Commissioner of Lahore. In that year a new Division was formed having its head-quarters at Amritsar, and including the districts of Siálkot, Amritsar and Gurdáspur. This arrangement continued until November 1884, when the Punjab Commission was reorganized and the Commissionerships were reduced from ten to six. This threw Amritsar and Gurdáspur into the Lahore Division, Siálkot being added to that of Ráwalpindi. Since 1884 Amritsar has ceased to be the cold weather head-quarters of a Commissioner.

The Mutiny.

The following account of the events of 1857, so far as they concern the Amritsar District, is taken from the Punjab Mutiny Report.

The city which gives its name to the Amritsar district is the principal mart in the Punjab. It is commanded by the celebrated fortress of Govindgarh. It is to the Sikh what the Isle of Mona was to the Briton of Julius Cæsar's day; what Mecca is to the Muhammadan and Benares to the Hindú. On Amritsar, as the pivot, might be said to turn the loyalty of the Khálsa. Did it fail us, the Sikh might be expected to rebel : did it stand firm, their attachment to us was secure. It was a source of much uneasiness that the stronghold was occupied by a detachment of the 59th Native Infantry with only 70 European Artillerymen. Captain

CHAP. I. B.
History.
The Mutiny.

Lawrence, Captain of Police, and Mr. Roberts, Commissioner, drove over, on the 13th May, immediately after the disarming at Meean Meer, to arrange for its safety. On their return to Lahore the following day, they represented to Brigadier Corbett the emergent necessity for pushing a body of European foot into it. He instantly complied, and, notwithstanding the alarming events of that day as narrated above, half a company of the 81st Foot was run across the same night in *ekkàs*, or native one-horse gigs. It entered Govindgarh peaceably by dawn of the 15th.

The 59th still remained in the fort, but, as soon as Europeans were available, the latter took their place. The 59th was disarmed by Brigadier-General Nicholson, commanding the movable column, on the 9th July. As soon as the outbreak occurred, one of the first measures adopted by Mr. Cooper, Deputy Commissioner, was to provision this fortress. It was rapidly and thoroughly effected without exciting any particular notice, and the fort then became one of our trusty bulwarks, which it had not hitherto been. Mr. MacNaghten, Assistant Commissioner, at the same time went out on the Lahore road to raise the country (a part of the Mánjha) against any deserters who might come by. Rewards were offered for any sepoy who had deserted; the smothered martial spirit of the people was kindled into a flame; escape for a deserter was hopeless, for every village became to him as a nest of hornets. The temper of the people was one great cause of the achievement which has made the Amritsar district famous in the annals of 1857.

On the 31st July a large body of disarmed sepoys appeared on the left bank of the Rávi, near Balghát, asking for information as to the fords. The people's most curious attention was aroused. They amused the sepoys for a few hours with various pretences, while runners hastened away to the neighbouring *tahsíl* of Ajnála and even on to Amritsar. Prem Náth, *Tahsíldár* of Ajnála, quickly brought down every available policeman he had, and it was found that these men were the 26th Native Infantry who had mutinied the previous day at Lahore, and, after committing four murders, had travelled across country, off the main lines of communication, 40 miles in 19 hours. A fight ensued: 150 men fell under the resolution of the villagers and police. By 4 P.M. Mr. Cooper arrived with about 80 horse accompanied by Sardár Jodh Singh, Extra Assistant, an old Sikh chieftain. The mutineers had escaped by a ford to an island in midstream. They were captured and executed next morning, 45 having died during the night from fatigue and exhaustion. Our critical position at this time justified the awful punishment of these mutineers, 237 in number. About 42 subsequently captured were sent back to Lahore, and there, by sentence of court-martial, blown from guns in presence of the whole brigade.

CHAP. I. B.

History.

The Mutiny.

Many Sikhs, however, on service with their regiments in the North-Western Provinces, failed their country and their masters. Many were drawn into the vortex of revolt, and after the fall of Delhi tried to steal home. A close search was made for them. When the regiments to which they belonged had murdered their officers the men were executed. In other cases they were punished by different terms of imprisonment. This operation was carried on, more or less, throughout the Punjab, but it is here noticed, as many of them had their homes in this district. The usual amount of disaffection was found amongst the Hindustánís in this district, and the same precautions were adopted as elsewhere in regard to their letters, stoppage of the ferries, and the expulsion of vagrants and emissaries from Delhi. Mr. Aitchison, Assistant Commissioner, was despatched on two occasions into the interior to guard a river or to give confidence to a subdivision, and Mr. Cooper himself for many weeks remained out on patrol duty every night until past midnight. Captain Parkins, Assistant Commissioner, had charge of the recruiting department, and Mr. MacNaghten, Assistant Commissioner, shewed considerable courage in the apprehension of an incendiary named Bhái Maháráj Singh and in his voluntary expedition to Atàri on May 14th to raise the country. Here he was willingly seconded by Diwán Náráin Singh, the agent of Sardár Khan Singh, Atáriwála. A sepoy and a native doctor of the 35th Native Infantry were hung at different times for seditious language. The executions produced a marked change in the demeanour of the people, and the moral effect of the presence of General Nicholson's movable column at different periods, aggregating about a month, was great. It might have been expected that the subscription to the six per cent. loan from the wealthy cities of Amritsar and Lahore, would have been large. The opposite was the case. Their contributions were inappreciable. Men worth half a crore of rupees offered a subscription of Rs. 1,000, and others on the same scale. Their niggard distrust of our Government spoke very unfavorably for their loyalty, and was in strong contrast with the eager co-operation of the rural population.

The scarcity of 1868 and 1869.

Since the mutiny the history of the district has been absolutely uneventful. The only occurrences out of the common were the failure of the monsoon rains in 1868 and 1869 and the fanatical proceedings of the Kúka sect shortly after in 1872. Much distress was caused in the uplands tracts to the south of the district by the failure of rain in these two seasons, particularly among the menial classes. The presence of the city increased the difficulties of the district, for its reputed wealth made it the centre to which distressed persons were attracted both from British and foreign territory, and there were at one time many thousand immigrants in the city and its neighbourhood, subsisting wholly upon charity. Relief works were started in the district on which labour was paid for at famine rates, such as roads from Tarn Táran to

CHAP. I. C. Population. The scarcity of 1868 and 1869.

Jandiála, Vairowal, and Hari-ki-ghât, and from the city to Ajnála. Houses from which the poor might be fed were started in Amritsar city and at the tahsíls and the work of filling in the great ditch from which the materials for the ramparts had been excavated, and which was a fruitful source of disease, were begun. Nearly 3,000 labourers a day were employed on this work alone. The works were brought to a close in April 1869, after the rain had removed the chief fear of famine, but had to be re-opened in August, when the usual rains again failed. This time the Ahluwália Dhab, a morass in the centre of the city, was taken up and from first to last nearly a lakh of labourers were employed on filling it up. The price of wheat rose to 9½ sers for the rupee. At the time it was remarked that the danger of high prices and railway communications might tend to denude the district of stocks, and leave a tract naturally rich and self-supporting in a bad way when famine comes. But it was overlooked that this same railway communication facilitated export to tracts which needed a replenishment of their food stocks more urgently than Amritsar. Amritsar may now suffer from scarcity, which may react on the cattle on which so much depends, but it is not likely with its present advantages to ever suffer from actual famine.

Section C.—Population.

Distribution of population.

Table No. 6 gives separate statistics for each tahsil and for the whole district of the distribution of population over towns and villages, by sex, and among occupied houses. As between the various tahsils, the density of the rural population is shown by the following figures for the total number of souls to each square mile of cultivation :—

	1891.	1901.	1911.
Ajnála	865	795	764
Amritsar	741	724	627
Tarn Taran	604	731	543

Towns and villages.

Table 7 gives details of the urban population. Amritsar is the only town in the district with a population of over 10,000. Jandiála, and Majitha, both in the Amritsar tahsil, and Tarn Taran are all small towns enjoying some form of municipal government. There are no towns in Ajnala, but the village of Ram Das is a notified area. It should be noted that the word "village" in Table 6 is used in the popular sense of a collection of inhabited houses, and not in the sense of a *mahal*, or estate separately assessed to land revenue. A description of a typical village will be found later on in this volume.

CHAP. I. C.
Population.
Growth of population.
Migration.

Between 1881 and 1891 the population increased by 11 per cent. and during the next decade by a further 3 per cent., but the last Census Report shows a decrease of nearly 14 per cent. in consequence of the ravages of plague and malaria. Nevertheless the present population is only slightly inferior to that in 1881. The actual figures are as follows :—

Years.	Population of
1881 ...	893,266
1891 ...	992,697
1901 ...	1,023,828
1911 ...	880,728

Table No. 8 shows the districts and principal states with which Amritsar has exchanged population and the number of migrants in each direction. Since 1892, when the colonization of the Chenab Colony was begun, nearly 100,000 persons have emigrated there from Amritsar, 57 per cent. of whom were males. The total number of residents of Amritsar born in other British districts is 85,698. The figures below show the general distribution of the population by birth place :—

Born in	Persons.	Males.	Females.
The district ...	778,897	450,614	328,283
The province ...	871,362	489,999	381,363
India ...	879,857	495,890	383,967

Amritsar is one of the most thickly populated districts of the province. It adjoins the submontane districts of Gurdaspur, where the density is greater, and Hoshiarpur and Sialkot, where the density is almost as great as in Amritsar itself. From these districts it takes population as well as from Lahore and Ferozepore, but to the two latter it gives far more than it takes. There is also a steady flow of emigration to the Chenab and Jhelum Canal Colonies. The migration to and from neighbouring districts and Kapurthala State is mainly reciprocal in type and is due to the exogamous customs of the Hindu Jats of the Central Punjab. There has been a great falling off in the number of Kashmiris resident in Amritsar City, partly due to the decay of the shawl trade and partly to the return to Kashmir of the refugees driven out of the state by the scarcity of 1878. The large excess of female over male immigrants is noticeable. It may be attributed to the comparative scarcity of

CHAP. I. C. Population.

females in the district due to the higher female death-rate. This has been partly traced to the notorious neglect of infant female life common in all districts of the central Punjab.

Age.

The figures for age, sex and civil condition are given in Table 10 and in more detail in Table VII of Part B of the Provincial Census Report for 1911. The *data* as to age are very unreliable, partly owing to the people's vague ideas as to their real age, which is natural in an uneducated peasantry, partly to the persistent tendency of the people to prefer certain numbers to others in stating their age, and partly to deliberate mis-statements for various reasons. It was found in 1911 that middle-aged females wished to be considered younger than they were, and that many old people, both men and women, who had no inducement for understating their age, were inclined to exaggerate it, while the ages of marriageable girls were commonly misrepresented. The migration of large numbers of young women to the canal colonies has reduced the strength of married females of 15 to 40 years of age. The whole subject is discussed in Chapter V of the Provincial Census Report of 1911, from which the following figures are taken, showing the distribution by age of every 1,000 of the population :—

	0—5	5—10	10—15	15—20	20—40	40—60	Over 60
Persons	129	134	119	87	304	164	63
Males	122	133	130	93	300	158	64
Females	140	135	104	79	310	171	61

As regards the relation of age to religion the conclusion drawn from the 1911 Census Report was that the Musalmans are considerably more prolific than the Sikhs or Hindus, while the Sikhs are peculiarly long-lived.

Vital statistics.

Table 11 gives the birth and death rate for each year up to 1911. Since the 1901 census the births have only three times exceeded the deaths, *viz.*, in 1906, 1910 and 1911. Table 12 shows the distribution over months of deaths from all causes and from fever.

The figures below show the annual death-rates *per mille* since 1901, calculated on the population of that year:—

	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.
Males	44	63·8	47·9	60·0	37·9	52·7	59·7	32·8	38·7	42·
Females	52·7	88·3	64·3	73·5	46·1	63·4	68·9	34·5	39·9	37·6
Persons	47·9	74·9	55·3	66·1	41·6	57·5	63·8	42·0	54·1	47·3

This gives an average death-rate for these ten years of 55 *per mille*, as compared with the average of 43·6 for the whole province. The birth-rate has varied during the past decade from 48·8 to 32·6 *per mille* and the average comes out at 43·2 (22·6 males and 20·6 females), as against the average for the whole province of 40·8 (21·4 males and 19·4 females). **CHAP. I. C. Population. Vital statistics.**

Diseases. The actual number of deaths in the past decade from cholera, fever, smallpox and plague are given in Table 11. The deaths from fever alone reached the total of 45,103 in 1908, when an exceptionally heavy monsoon rainfall was followed by extensive floods. Since then the number has steadily declined each year, partly, no doubt, owing to the preventive measures taken. Many hollows in the neighbourhood of the city have been recently filled in and the sanitary arrangements greatly improved. A new system of water-supply has been completed for Amritsar city. Plague was very severe from 1903-07, but the number of deaths decreased enormously in 1908-1909 only to revive again in 1910 and 1911. A special officer of the Indian Medical Service is attached to the district as assistant for plague prevention to the Civil Surgeon, and he has an experienced staff under him. Attention has been mainly directed to inoculation, the extermination of rats, the isolation of cases and the evacuation and disinfection of infected buildings.

Table 14 shows the number of afflicted persons, of insane, blind, deaf-mutes and lepers, both male and female. The proportions per 10,000 of either sex for each of these infirmities are shown below :—

	1911.		1901.	
	Males.	Females.	Males.	Females.
Insane	2	1	3	1
Deaf-mutes	5	4	4	3
Blind	27	31	40	43
Lepers	3	2	2	1

Infant mortality and birth customs. There is a high infant mortality amongst Hindus, Sikhs and Muhammadans of all castes and tribes ; to some extent this is due to unhygienic conditions, but also to the general tendency to care more for male than for female children, which results in the neglect of, and higher mortality in, the latter. The women also are very superstitious and will refuse proper medical assistance in cases of serious illness of their children, preferring their own local and hereditary remedies, especially in the case of smallpox, *torkhi* and *rakhra*. This statement applies more particularly to the rural population, but even in the Amritsar city it is of fairly general application. Female infanticide is said to be a thing of the past and proved

CHAP. I. C. Population. Infant mortality and birth customs.

cases are now very few and far between. At the time of birth the woman is kept in a closed inner room of the house, which is, as a rule, very inadequately ventilated, but is never left alone, some member of the family always remaining with her until a period of at least thirteen days after delivery has elapsed. It is considered unlucky for a pregnant woman to visit another pregnant woman near the time of delivery. No child, who is wearing *taviz* (charms generally written on copper), is allowed to enter the room, where the new-born child is lying. The child is never removed from the room of its birth during the day-time or even at twilight, but always in the late evening.

Sex statistics.

A very noticeable change in the proportion of the sexes is shown by the following figures to have occurred during the last decade:—

	1881.	1891.	1901.	1911.
Number of females to 1,000 males	820	828	829	774

From Table 11 it will be seen that the birth-rate for females has been invariably lower than that for males, while the death-rate has been considerably higher. The excessive mortality among females during the past decade, particularly from plague, has made it a very difficult task to deduce any reliable conclusions from the statistics of the 1911 Census. The question is fully discussed by Pandit Hari Kishen Kaul, R. B., C. I. E., in the Provincial Census Report of 1911. It will suffice here to note that, while in the Province as a whole there are 817 females to every 1,000 males, in Amritsar the proportion has fallen to 774 to every 1,000.

Civil condition. Marriage customs.

The figures for civil condition are given in Table 10 and more fully in Table VII of the Provincial Census Report, Part II, the actual number of single, married, and widowed for each sex, in each religion, is there shown, and also the distribution, by civil condition, of each sex in each age period

In Amritsar there are no marriage customs peculiar to the district. The age at which children are married depends much on the circumstances of the parents, but it is usually between the ages of 10 and 14 among the agricultural classes. The practice of taking money or valuables, in exchange for an eligible marriageable girl, is believed to be fairly common, but its exact extent is difficult to ascertain, for the practice is reprobated and is rarely admitted. Large sums are spent on marriages by the Jats and Rajputs and are a frequent cause of debt. A man will mortgage half his holding rather than allow his son to pass the age at which he should be married. The bargain of betrothal is always concluded through a go-between, usually the village barber, and is the

CHAP. I, C.
Population.
Civil condition. Marriage customs.

real contract of marriage. The actual ceremony follows three or four years later.

The following account of the marriage customs of the district is taken from the Customary Law of the Amritsar District:—

"Among Khatris, Brahmans and Aroras some two or three "months before the marriage, the girl's father sends for the horos-"cope of the boy and with its assistance a lucky date and moment "for the marriage is decided by the *pandit*. Information of this lucky "date and moment is then sent to the boy's parents and both sides "begin to make preparations. Then between 11 and 21 days "before the date thus fixed, a Brahman is sent to the boy's "parents. He takes with him a letter, called *Sahi chiththi*, and "*Tewar* (set of clothes) as well as some ornaments. The date is "again mentioned in this letter. On the arrival of the Brahman "the boy's father gathers together his brotherhood. A square is "traced with flour on the ground by a Brahman. On this square "a stool is placed on which the boy is seated, texts being recited "by Brahmans. The letter and other things received from the "girl's house are put into the boy's lap. The letter is then open-"ed and read in the presence of the assembly. Between three "and seven days before the date, the ceremony of *Tel Charhawa* is "performed. This consists of the boy and girl being bathed in the "presence of the females of their brotherhood, who rub oil on the "child's head. This ceremony is performed in the village of the "boy and the girl, but if a river lies between the villages of the "boy and the girl, this ceremony in the case of the boy is not "celebrated till after the river is crossed.

"On the date fixed for the marriage, or earlier if required by "the distance between the villages of the boy and the girl, the "boy's father forms a procession (*Barat*) and starts with it to-"wards the girl's village. The distinctive mark of the boy on this "occasion is the *Sehra* or flower garland round his forehead. As "soon as the girl's relations see the procession arriving, some of "them are sent out to meet the marriage party and to take it to "the halting place already fixed upon. In the evening the cere-"mony of *Milni* is performed. Male relatives of both sides meet "outside the village and representatives from each side embrace "each other. A dinner is then given to the marriage party and "the boy is taken to the house of the girl's father.

"The marriage then takes place and the ceremony called "*phera* or circumambulation of the sacred fire is completed. This "is the most essential ceremony and it is this that makes the "marriage union indissoluble. For this purpose a canopy "supported on four sticks is erected in the courtyard of the "house of the girl's father. Under this canopy the boy and "the girl are seated each on a *khara* (basket with bottom upwards). "On the ground between the two *kharas* sand is spread and on

CHAP. I C.
Population.
Civil condition. Marriage customs.

"this wood of the *dhak* or *ber* tree is piled as fuel and lighted. "One corner of the outer cloth of the boy is then tied to that of "the girl and they are made to walk round the fire four times, "the boy leading on three occasions and being led by the girl on "the fourth. During all this while *mantras* are recited by the "Brahmans, but the married pair are silent. After the *phera* "ceremony is over, the bride and the bridegroom are taken "inside the house where the boy is inspected by the females "and jokes are interchanged.

"On the date fixed for the return back of the marriage party "which is usually the second or third day after its arrival (according to the wish and mean of the girl's father) the articles that "form the dowry are gathered together and shown to the marriage "party as well as to the girl's brotherhood. On this occasion the "bridegroom's father gives the *lagis* (menials) their perquisites "and distributes alms. The boy is then again called inside the "house of the bride's father and the dowry gifted to him. The "marriage party with the bride then returns to the bridegroom's "house." *Muklawa*, or the bringing home of the bride, follows when the girl becomes adult. Cohabitation does not take place till after the *Muklawa*. If both the parties are of full age, this ceremony is performed on the same occasion as the marriage itself; otherwise it is completed during the first or third year of the marriage, but never during the second year. For this purpose a few days after her arrival at the bridegroom's house, the bride is sent back to her parents and the former goes there for the second time to fetch her. On this occasion, too, some more articles are presented by the girl's side. The Arya Samajists, as well as other Hindus of advanced views, do not strictly observe all these ceremonies, with the exception of the circumambulation of fire, which is essential in all cases.

The above remarks apply to other Hindu tribes, with the exception of those Sikhs who have joined the Singh Sabha and who celebrate their marriage, not by *phera* round the fire, but by what is called *Anand parhánas*.

Sikh marriages were at one time always conducted by a Brahman, but the custom has of recent years changed considerably. The following paragraph is a quotation from the Provincial Census Report of 1911:—

"Sikh marriages were in the past celebrated according to "the ordinary Hindu rites, performed by Brahmans, with the "difference that hymns of the fourth Guru, known as the "*lawán*" "were sung simultaneously by the females during the ceremony "in place of the Hindu songs. Later on, a dual ceremony was "adopted, whereby the Hindu rites were gone through first and "then the wedded couple circumambulated the Granth Sahib four "times, while the Sikh priest read the *lawán* mentioned above. "The orthodox Sikhs of the modern times have, however, com-

CHAP. I. C. Population.

" pletely given up the Hindu ritual and content themselves with " the circumambulation of the Granth Sahib and the reading of hymns by the Sikh priest."

Civil condition. Marriage custom.

Widow marriage is practised by all Hindu and Sikh Jats, and the brother of the deceased usually claims his right to marry the widow by the ceremony of throwing the sheet (*chádar dáli*). As regards polygamy, divorce and other similar questions, the customs of the district conform with those in vogue in the rest of the Province generally, a full account of which is supplied in Chapter VII of the Provincial Census Report of 1911.

Among Muhammadans marriage by the *nikah* ceremony takes place at a later age than among Hindus, often when the bridegroom has attained the age of puberty. The universal rule obtains among Hindu Jats that a man may not marry a woman of his own clan or *got*, and this rule is also observed by many Muhammadan Jats, who have, in comparatively recent times, been converted to Islam. It is even extended so as to include within the prohibited degree a *got* with which another is already closely connected by marriage. These restrictions are, however, gradually been broken down and there are numerous instances in the Ajnála tahsil of Jats, who have married within their own *got* and whose wives have been accorded their full status by and in the *barádari*. The children of such marriages are treated as legitimate.

Language.

The prevailing language, or rather dialect, is Punjabi. The dialect varies from district to district, and it is possible, after some acquaintance with the accent of the Amritsar Jat, to tell that a man comes from the Rechna Doáb across the Rávi, or from the Jullundur Doáb on the other side of the Beas. But the Punjábi of the Mánjha is said to be as pure as any Punjábi spoken in the province. The purest dialect in the district is spoken by the Sikh Jats of Tarn Taran. The Muhammadans, though speaking Panjábi, are more given to intersperse Persian words picked up from the educated classes, and all races have begun to adopt as part of their own language the English and Hindustáni words, which they hear about the courts, and which are in constant use in judicial and revenue procedure. Panjábi is also the language of the people of Amritsar city, though, of course, what they speak is not so pure as what is heard among the Jats. More detailed information will be found in Table No. X of the Provincial Census Report for 1911, while, in Chapter IX of the same report, the several languages are briefly discussed. The figures in the margin give the distribution of every 10,000 of the population by language omitting small figures.

Language.	*Proportion per 10,000 of population.*
Punjabi	9,889
Other Punjab vernaculars ...	91
" Indian " ...	13
Europeans languages ...	6
Other Asiatic vernaculars ...	1

Of the thirteen in 10,000, who are classed as speaking other Indian vernaculars, nine in 10,000 speak Kashmiri.

CHAP. I, C.

Population.

Tribes and Castes.

Table No. 15 gives the figures for the principal castes and tribes of the district with details of sex and religion and also a supplement of the various sub-divisions of Jats. The figures for the local distribution, by tahsils, of the tribes and castes are also given and are taken from the Census Report of 1911, Part II, Table XIII, Part II. A. It would be out of place here to attempt a minute historical account of each tribe. Many of them are found all over the Punjab, and their representatives in Amritsar are distinguished by no local peculiarities. It will suffice to give a brief account of the chief land holding tribes, of whom the following are in Amritsar notified as Agricultural Tribes within the meaning of the Land Alienation Act :—Arain, Awán, Dogar, Gujar, Jat, Kamboh, Lobána, Moghal, Pathán, Rájput, Sayad.

The Jats.

The most important of these is the Jat, but this is a very wide term and includes classes between which there is often a strong contrast. The commonest is the Sikh Jat, the follower of Guru Gobind Singh, who has taken the *pahal* at the Akál Bunga, Anandpur, or other places where the rite is administered. There is the Narinjáni Jat, found in the neighbourhood of Jandiála; they do not always take the *pahal*, do not practise the usual *kiria karm* or death ceremonies, have little reverence for Brahmins, take the ashes of their dead to the Nathuána tank instead of to the Ganges, and are followers of Bába Handál. The Hindu Jat, or Sultáni, followers of the saint Sultán Sarwar, to whom tobacco is not an abhorrence, and who as cultivators come about midway between Sikh and Muhammadan Jats, have decreased in numbers of late years, having largely become orthodox Sikhs. Since 1881 their number has declined from 16,843 to 2,019 at the Census of 1911. Lastly, there is the Muhammadan Jat who has many of the shortcomings of his co-religionist, the Rájput, and, as a rule, takes a low rank as an agriculturist, though to this there are some notable exceptions, as, for example, the Muhammadan Jats of Nág, Sohiyán, and Rámdiwáli. A Sikh Jat will not ordinarily speak of the Muhammadan Jats of a neighbouring village as Jats. If asked, he will describe himself as a "*zamíndár*" by which he means a Hindu or Sikh Jat, but he will describe his Muhammadan Jat neighbour as a "Musalmán," even though he may be himself a Jat of the same *got* as the Muhammadan. Not that he denies the title of the latter to be a Jat, but in common speech he restricts the term Jat to cultivators following the Hindu or Sikh faith.

Local distribution of Jats.

The total number of Jats returned at the Census of 1911 was 200,759. This is $22\frac{3}{4}$ per cent. of the total population, and 28 per cent. of the rural population. Their local distribution is as follows :—

Amritsar Tahsil	81,009
Tarn Táran Tahsil	83,175
Ajnála Tahsil	36,575
Total ...	200,759

CHAP. I. C.
Population.
Jats of the Manjha.

By far the greater portion of the Hindu Jats follow the Sikh religion, and the best of the Sikh Jats are found in that part of the district which is known as the Mánjha. This is a term which is sometimes loosely used to denote the whole of the upper part of the Bári Doáb, as distinguished from the Málwa, the country lying south of the Sutlej, and including the most of Ludhiána, Patiala, Ferozepore and part of Jullundur. But a Sikh Jat of Amritsar in speaking of the Mánjha refers more particularly to that part of the Tarn Táran tahsil which lies below the old road from Atári to Goindwál and to the Kasúr and part of the Chunián, tahsils of Lahore. Ajnála is not counted as in the Mánjha, nor, properly speaking, is the Amritsar tahsil. Now that the old *bádsháhi* road above mentioned has been superseded by the metalled Grand Trunk Road, the limits of the Mánjha have, in common speech, been extended, and the whole of that part of the Amritsar district which lies on the right of a traveller going towards Jullundur on the Grand Trunk Road, is spoken of as the Mánjha. Jullundur and Kapurthála are spoken of as the Doába, anything beyond that is vaguely termed the Málwa, the Sialkot district is "*darya par*" or "*Ravi pár*", and different parts of the Amritsar tahsil are referred to by mentioning the name of some central village, such as "*Majitha ki taraf*" or "*Mahta ki taraf.*" The Gurdáspur district, though in the upper part of the Bári Doáb, is never held to be part of the Mánjha. In short the Sikh Jat of Amritsar, in speaking of the Mánjha, may be understood as referring to that part of the district which is peopled almost entirely by orthodox followers of Guru Gobind Singh, excluding the tract once extensively held by Sultani Hindu Jats (the Bangar of Amritsar tahsil,) by Narinjáni Sikhs (the Jandiála sandridge,) the *nahri* country round Amritsar, where Kambohs and miscellaneous tribes become most numerous, and the Ajnala tahsil where there is a strong admixture of Muhammadans, Arains, Jats and Rájputs, who are so numerous in the Rávi-side tract. Certainly the Sultánis have now largely become orthodox Sikhs, and the Gil Sikh Jats near Majitha, and the Aulakhs and others of Ajnála, are as devoted followers of Guru Gobind Singh as the men of the Mánjha, but the distinction is still kept up and the dividing line may be roughly taken to be the Grand Trunk Road.

Sikh Jats.

The Sikh Jats, of whom the Mánjha Sikhs are the pick, are the finest of the Amritsar peasantry. In physique they are inferior to no race of peasants in the province, and among them are men who in any country in the world would be deemed fine specimens of the human race. The Sikh Jat is generally tall and muscular, with well shaped limbs, erect carriage, and strongly marked and handsome features. They are frugal and industrious; though not intellectual, they have considerable shrewdness in the ordinary affairs of life, and are outspoken and possessed of unusual independence of Character. They are certainly litigious, their natural stub

CHAP. I. C. Population. Sikh Jats.

bornness leading them to persevere in a case long after all chance of success is gone, but at the same time they are perhaps as honest and simple a race as is to be found in India, for the falsespeaking, common in the law courts, is conventional, and hardly indicative of moral depravity. They make admirable soldiers, when well led, inferior to no native troops in India, with more dogged courage than dash, steady in the field, and trustworthy in difficult circumstances, and without the fanaticism which makes the Pathán always dangerous. In private life they are not remarkable for chastity, and they are largely addicted to the use of intoxicating drugs or spirits, but on the whole their faults are less conspicuous than their virtues. The women are inferior in physique to the men, and age sooner, probably from the effects of early marriages, and are not remarkable for beauty. But they have the same industrious habits as the men and make excellent housewives, frugal and careful in management, and exercise a very considerable amount of influence in the family.

Sub-divisions of Jats.

A full list of the different sub-divisions of Jats, male and female, and their distribution by tahsils, will be found in Table 15. The sub-divisions of greatest numerical strength are the Sindhu, Gil, Randháwa, Sidhu, Dháun, Dhillon, Bal, Aulakh, Pinnun, Chábil, Sohal, China, Mahil, Bhullar, Káng and Mán. Of these the first three mentioned far exceed in numbers any of the others.

The Sindhus.

The Sindhu Jats are, it will be seen, the strongest clan in the district. They are found in detached villages at different points of all three tahsils, but muster especially strong in the south-west corner of Tarn Táran. The central village of this group is Sirháli Kalan, and from this they have founded and peopled the ring of villages which lie round it. Here they hold thirty-two villages. This part of the tahsil was formerly known as the Kuára Mánjha, a bleak treeless tract with deep brackish wells, a soil sometimes poor and sandy, but generally hard and unpromising, and an uncertain rainfall. Canal irrigation has now changed the appearance of the country and the system of cultivation to some extent, but still the soil yields a small return, and holdings being small, the Sindhus have always taken eagerly to military service. Hardly a family but has one or more members in the native army, the Burmah Military Police or in service in Hong-Kong or the Straits Settlements. Military employ is traditional among the Sindhús, and from this tribe the Sikhs drew many of their best men. They are the best specimens of the Mánjha Jat which the district can show. The way they hold the land is perplexing, for most of those who own land in the later-founded hamlets round Sirháli are still recorded as owning land in Sirháli itself, and it often happens that a family owns land in three or four estates. It is difficult to cultivate each one of these separate holdings, consequently exchanges and tenancies are common, and often give rise to disputes, which, as land is scarce, are keenly fought out. Men on service find it easy to dispose of their land by mortgage during their absence. It is

CHAP. I. C.
Population.
The Sindhus.

easily redeemed out of savings on their return, and in every village there are pensioners who are only too ready to take it up, and advance money on it. The clan is found in some strength in the neighbouring corner of the Kasúr tahsíl, and also across the Sutlej in Ferozepore, but there is no other collection of Sindhu villages in Amritsar. The Sindhús of the Sirháli *ilaqua* have an ancient feud with the Pannuns of Naushera and Chandriwála, which is said to have arisen out of a murder by a Sirháli man of a Pannun connection by marriage. The two clans are now good enough friends, but still intermarriages never take place between the Pannuns of these two villages and the Sindhús of the Sirháli neighbourhood. Neither clan will give or take a bride from the other. There is no well known family belonging to this clan. The Sindhús are independent and not much given to abide by the law, and their headmen have little authority. Muhammadan Sindhús are very rare.

The Gils.

The next strongest clan is that of the Gils. They are known as excellent and hardworking cultivators. They hold about twenty-five villages in whole or part in Tarn Táran, but they are scattered all through the tahsíl. They muster strongest in the Amritsar tahsíl, near Majítha, and it is to this clan that the Majítha Sirdárs, the descendants of Sirdár Desa Singh, belong. Sirdár Bahadur Ajúr Singh, C. I. E., of Naushera belongs to the Sher Gil branch of the tribe. Nág and Majítha and Sohiyán Kalán (part) in the Amritsar tahsíl, and Dhotián in Tarn Táran are the largest settlements of this clan. The Gils of Nág are Muhammadans, but are excellent cultivators, and get all they can out of their land, while those of Dhotián (who are Sikhs) are remarkably fine specimens of the Mánjha Jat, and are often found taking service.

The Dhillons.

The Dhillons are found most in the Mánjha, in fact along with the Sindhús, the Gils, Pannuns, Aulakhs and Sidhús, they take up nearly the whole of the Mánjha proper. But the Dhillons lie further up the tahsíl, in the upper half of it, the country in which the Bhangi *misl* was once supreme. They hold twenty-eight whole villages and parts of others, and many of their villages are among the largest in the tahsíl, such as Kairon, Padri, Gaggobua, Panjwar, Chabál, Dhand, Kasel, Gandiwind, Serai Amánat Khan and Leiyan. All these are typical Mánjha villages, and supply many recruits to the army, especially Dhand and Kairon. Most of them are favoured with canal irrigation and there are no better cultivated estates in the Tarn Táran tahsil than Kasel and Gandiwind. In the other tahsils they are more scattered, but they are fairly strong in the Amritsar Bangar, and across the Beás in Kapurthála. The Amritsar Dhillons say they came originally from the Manjha, but this is doubtful. They intermarry with all *gots* except with the Bals. The story is that a family bard, or Mirasi, from a Dhillon village was refused help, when in difficulties in the Bal country, and in

CHAP. I. C. Population. The Dhillons.

revenge cursed the whole Bal clan. Mirásis were in those days more of a power than they are now, and the Dhillon clan took up the feud, which survives to this day in the refusal to intermarry. The Dhillons of Amritsar, who live alongside the Bals of the Sathiála *iláqua*, do not carry the feud further than this, but those of the Mánjha will not eat or drink in a Bal village, or from the same dish as a Bal. Mirásis of course keep up the feud, too. Among the Dhillons, Sardár Bahádur Thákur Singh, Bhangi, zaildar of Panjwár, is a leading man. His son Harnám Singh has received a grant of 10 squares in the Lyallpur District.

The Randháwás.

Randhawas come next in order. They are hardly met with in Tarn Táran, but are very strong all along the Batála border, and down the sandridge in the Amritsar tahsil, especially near Mahta and as far as Kathunangal. They are the strongest *got* in the Amritsar tahsil and hold thirty-nine villages. Many of them are Muhammadans, and until lately very many of them were Sultánis, but these are now fewer than they were. They rank high as cultivators, and cane-growing is a speciality in their country. Several leading men in the time of the Sikhs belonged to this *got* and among the best known families left in the district are those of Bhagwàn Singh of Chamiari, who enjoys a *jagir* of Rs. 600 from the village of Dhariwál, Tahsil Ajnála, and Khushál Singh of Kathunangal.

The Aulakhs.

The Aulakh Jats are most numerous in the Ajnála tahsil, but there is also a cluster of nine villages round Shabázpur in Tarn Táran, held by this clan. Though quite a small village, Shabázpur is well known, and the corner of the Mánjha in which it lies takes its name from the village and is generally known as "Shabázpur ki taraf". But it is round Kohála in Ajnála that the Aulakhs are met with in strength and their chief villages are Kohála, Koháli, Lopoki, Chawinda Khurd and Kalán, Mádoki, Barar and Chogáwan. Their leading men are not above the yeoman class, but furnish three of the zaildars of that part of the tahsil, viz., Massa Singh, Daráb Khán and Bela Singh. The larger portion of their country is profusely irrigated by the Bári Doáb Canal, and they are a prosperous and well-to-do clan, though with small holdings.

Other *gots* of Jats.

The Chahils own sixteen villages near Sheron Bágha in Amritsar. The best known member of the tribe was the late Sardár Bahádur Arjan Singh, C. I. E., who held a jagir worth Rs. 2,800 per annum, 2,500 kanals of land in Tarn Táran tahsil, as well as 10 squares in the Lyallpur district. He was an Honorary Magistrate and Civil Judge of the first class, an Assistant Collector and Sub-Registrar, President of the Local Board of Tarn Táran, a Fellow of the Punjab University, a Member of the Council of the Aitchison College and a Provincial Darbari. His estates are being managed by the Court of Wards during the minority of his two sons.

CHAP. I. C.
Population.
The Sidhus.

The Sidhus hold, round Atári and Bhakna, fourteen villages in all. The Atâriwála family belong to this clan, and a notice of the family, the present chief of which is Sardár Balwant Singh, will be found further on. They have few representatives in other parts of the district, their country being mostly in the Ferozepore district, where they hold the entire south and west of Moga, the Mahráj villages, the greater part of southern Mokatsar and numerous villages in the sandy tracts of the Ferozepore and Zíra tahsils. They trace their descent from Ràja Jaisal, a Mánj Rájput, from one of whose descendants, Barár, have sprung the ruling families of Patiála, Nábha, and Jind. Other details of the Sidhu clan, also known as the Barárs in Ferozepore, will be found at page 494 of the first volume of Griffin's Punjab Chiefs, and in the Gazetteer of the Ferozepore district, where the clan is of the first importance. The Sidhus of Amritsar are almost entirely Sikhs and live in the Tarn Táran tahsil. Their numbers were very much underestimated in the Census of 1891, when their strength was given as 3,682, whereas by the latest Census return they number 8,931.

Other gots of Jats.

The same remark applies to the Bal Jats, who hold the large villages of Bal Khurd and Kalán near the city, besides Sathiàla, Butála, Jodhe and Bal Serai, in the Bangar of Amritsar or twenty-three villages in all, and to the Pannun Jats, who have spread from the Doába, and were set down as numbering only 260, while the present Census return shows their number as 4,791. They own seven large estates in the Mánjha, including Naushera and Chaudriwála, so that it is almost certain that numbers of them, owing to some mis-reading of the name, were previously classed amongst miscellaneous Jats. The principal village of the China Jats is Har Seh China, near Rája Sánsi, in Ajnála, The Sadal Jats, of whom no separate return was given in 1891, number 2,695 and all inhabit the Amritsar Tahsil. The Bhullars are a fairly numerous clan and with the Máns and part of the Hers, have the honour of being known as *asli* or original Jats, all others having enrolled themselves in the great tribe of Jats at a later date. No satisfactory explanation is forthcoming as to why all the Hers are not ranked as originals, nor is it clear whether any particular village or family belongs to the original clan or not. The Bhangus hold the large village of Khiála (Khurd and Kalán) in the same tahsil. They and the Sohals, inhabiting the village of that name in Tarn Táran, enjoy the reputation of being among the most lawless in the district. The Kángs hold a compact cluster of villages near Tarn Táran, chief among which are Kang, Kalla and Mál Chak. The Jhawára Jats of Mattewál and the neighbourhood and the Mahil Jats of Ajnála are not now classed separately in the census returns.

Rajputs.

The land-owning Rájputs of the district are all Muhammadans. No village is owned by any clan calling themselves Rájputs

CHAP. I. C. Population. Rajputs.

and professing the Hindu religion. The chief clans are as follows:—

Bhatti	16,806
Chauhán	2,801
Náru	1,043
Mánj	618
Miscellaneous	12,871
	34,139

The above details must be accepted with caution, for it is well known that many Muhammadans call themselves Rájpúts, who by birth have no claim to the name. This is probably the case mostly with the Rájpút residents in the city, who number about 5,000, but these are not landowners, being for the most part labourers, or following miscellaneous occupations.

Among the land-owning classes Rájpúts are found most in Ajnála along the river bank. From Diál Rajpútán and Ináyatpur, as far as Fatta near Bhindi Aulakh, the proprietors are almost all Rájpúts, and throughout the tahsil they hold about 13 per cent. of the cultivated area. They have all the faults commonly found among Muhammadan Rájpúts, of which pride and indolence are the chief. They take a low rank as cultivators, and are much given to employing Aráins and other industrious classes to cultivate their land, with the result that many of the latter have acquired occupancy rights in Rájpút villages. They are not, as a rule, prosperous, at least in Ajnála, and are often deeply in debt, but it is nearly always observable that one or two leading men, in each village, are distinctly well-to-do, and make an income by lending money to their brethren.

In Amritsar they are better off and have larger holdings. Their chief villages in that tahsil are Bhorchi, Fatehpur, Málowál, Khabba, Sadhár, Ajáibwáli, and Ibban, and in Tarn Táran, Palásaor, Bharoál, Diál, and Bhaini. Traces of the former supremacy of Rájpúts are to be seen in the cases where they enjoy a *talukdári* allowance exacted by them in their capacity as superior owners from neighbouring communities of Jats or Kambohs who were originally settled by the Rájpúts as tenants, but who have come to be recognized as having almost full rights of ownership.

The Kambohs.

The Kambohs take quite the first rank as cultivators in the district. Their industry is proverbial, and they seem to get more out of the land than even the Jats. They number 14,502 souls all told, of whom 10,217 are Muhammadans. They are found principally to right and left of the Grand Trunk Road, on either side of Jandiála, their best villages being Bohorú, Nizámpur Nawápind, Táragarh and Thotián in Amritsar and Jehángír in Tarn Táran. Two-thirds inhabit the Amritsar Tahsil. The Muhammadans

CHAP. I. C.
Population.
The Kambohs.

among them are hardly distinguishable from Aráins, and the Sikhs are in every way similar to the Jats. They take the *pahal* and reverence the same Gurús, and observe the same customs. In appearance they are usually shorter and more thick-set than Jats, with less pronounced features, and altogether show less breeding. They have their *gots* just as the Jats have (the chief are Marok, Josan, and Jand) and marriage within the *got* is forbidden. But they never marry outside the tribe, with Jats or other Sikhs, and even with the Sainís of the Doába, they have no connection. It is probably only within the last fifty years that they have come to be recognized as owners of land in Amritsar, and that in former times the highest status they could aspire to was that of tenants with some right of occupancy in the land on which they had been settled, and had broken up. There are numbers of them in the city, where they excel as market gardeners, but the city Kambohs are often in debt and are not so prosperous as those living in the villages. Like Aráins they are easily induced to leave home by the hope of extra profit as cultivators in canal-irrigated tracts, and they have been found most ready to go as settlers to the waste lands on the Chenáb Canal, where they have kept up their reputation as cultivators. At home they are generally found cultivating as tenants in several villages round their own, and, having little land of their own, and being given to multiplying fast, they are willing to pay a high rent. As peasant farmers they are unsurpassed, being careful of their land and their cattle, and never sparing of themselves. However, beyond this they seldom rise. Their wits are thick and education among them is rare, but, when enlisted, they make good soldiers, and several of them have risen to high rank as native officers.

The Aráins.

Aráins have many of the good qualities of the Kambohs, being industrious and frugal, but with less enterprise. Though the Kambohs have largely decreased in Amritsar since last census, the Aráins have fallen off in numbers very little despite the general fall in the total population. In every Aráín village there are many names still borne on the record, though the owners have for many years been absentees. They show best as cultivators of irrigated, and especially well-irrigated lands, their style of cultivation being on a small scale. Each Aráín is eager to have his holding separated off and in his own management, and when he has got this done, he divides off his fields into small compartments, in which with the most careful industry he will cultivate vegetable and other produce needing constant hand labour and watching, such as no other tribe will take the trouble to perform. Everything with the Aráín is on a small niggling scale, and he is apparently devoid of ambition. Their expenses are usually small, and they have few luxuries, yet they are almost all, more or less, in debt, though rarely deeply involved. Military service is practically closed to them and they are seldom educated. Not one in a hundred of the Aráíns in Amritsar

CHAP. I. C. Population The Aráins.

is literate. They are content to do as their fathers did before them and do not care to rise. They are found all over the district, sometimes as owners, often as occupancy tenants, and frequently as tenants-at-will paying high rents. Kakka Kariala and Gujarpur are the best known Aráín villages in Tarn Taran; Kadirabad, Buthangarh, and Daud in Amritsar. The Kadirabad Aráíns were once of some position, and one family held a jagír, but they are now of little importance. Round the city they are especially numerous, being attracted by the market for fruits and vegetables there; they not unfrequently come to grief by engaging to pay higher rents than they can afford. But it is in Ajnála that they are most found. In Rája Sánsi and Chamiári, under the Sirdárs, and in Rámdás, on the Mahant's land, they figure largely as tenants with or without a right of occupancy, and there is quite a colony of them in the Sailáb circle below Bhindi Saiadán. Much of the rich market garden cultivation in Talla and Saurián is due to the Aráín tenants, and their own villages of Chak Misri Khan, Vairoki, Mohleki, Bhilowal and Bhaggupur are models of careful farming on a larger scale, and of the ordinary type.

Other tribes.

The other tribes found owning land need but little mention Dogars own but few villages, such as Bhalaipur in Tarn Taran Khankot and Talwandi in Amritsar, and a few near the Sakki in Ajnála. They are of nothing like the importance of the Dogars in the Bet of Ferozepore. Gujars are fewer still, and those who are shown in the census returns are mostly cowkeepers and dairy men in the city. They are easily recognized by their sharp features, bare heads, long black straight hair and by the peculiar pattern of dark green checked loin cloth which they affect. Sheikhs and Saiads do not often figure as owners of land. The Saiad village of Bhindi in the Ajnála Sailáb circle is the best known. Khatris and Aroras usually appear as purchasers. The principal Khatri sections are the Bunjáhi, Sarín Chárzáti, Jausan, Jammún, Khanne, Kapúr, and Marhotra. And among the Arorás the principal are the Uttaradhi, Gujráti, and Dakhana.

Chuhras.

The chief tribes of village menials will be noticed in the next chapter. In numerical importance the Chuhras occupy the first rank, being nearly 12 per cent. of the total population of the district. In speaking of the industry of the Jats and other agricultural classes, we are often apt to give small credit to the industry of the Chuhras, who are absolutely indispensable to the landowners, as agricultural labourers, and who perform an immense amount of field labour for a very slender and precarious wage. The Jat and the Kamboh may be industrious in the extreme, but their industry would be of little avail in tilling the area of land at present under cultivation in the district, if it were not for the help they obtain from the Chuhrás. On the latter falls a large share of the labour of preparing the land for the crop, the whole work of manuring it, and much thankless labour is perform-

CHAP. I. C.

Population.

Chuhrás.

ed by them in irrigating it during the cold winter nights. When harvest time comes round the most of the reaping and winnowing falls to the lot of the Chuhrás, and this is perhaps the hardest in the whole year's round of field work. In the whole district there is one Chuhra to every two Jats, and most landowners employ one or more Chuhrás as field labourers. The Jats often complain of the large amount of the grain which they have to dispense to the Chuhrás and other village menials at harvest time, but are too apt to forget that it is but a small remuneration for the amount of work which menials have performed.

Mahtams.

The Mahtams are the nearest approach to a criminal tribe in the district, but they are not proclaimed as such under the Act. They are found only along the Rávi, particularly in Bhindi Saiadán and Ballarhwál, and where there is, in any village, a large expanse of *bela* land growing reeds. They are a degraded class living on all kinds of garbage, if they can get no better food, and besides being given to thieving, are most quarrelsome neighbours. They often occupy grass huts, close to the field which they cultivate, and eke out a living by making baskets, mats, and stools from reeds, and by raising and selling vegetables. They marry only within the tribe. In other districts they snare game and other animals, but in Amritsar wild animals are scarce and the Mahtams principally live by thieving and cultivation.

Kashmírís.

The Kashmirís have diminished largely in numbers since 1881. Their numbers are now returned as 18,609 against 32,495 at the census of 1881 and 21,844 at that of 1901. This has already been noticed as partly real, owing to the sickness in the city having more than decimated the Kashmírís in 1881, and to the decay in the shawl-weaving trade. They are universally Muhammadans and mostly resident in Amritsar itself. They are almost entirely immigrants from Kashmír, and engaged in weaving and in carpet factories. In person, the Kashmírís are slight, narrow-chested, and weak, possibly from the nature of their employment. They have sharp Jewish features, but the women when young are generally handsome.

Leading families.

In the next following paragraphs is given a short account of the leading families of the district. More detailed notices of each of them will be found in the new edition of Griffin's Punjab Chiefs, which was revised, corrected and brought up to-date in 1909 by Major W. L. Conran and Mr. H. D. Craik, I. C. S., Settlement Officer of this district.

The Sindhanwálias of Rája Sánsi.

Sardár Raghbir Singh is the head of the Sindhanwália family, which belongs to the Sánsi *got* of Jat Sikhs. Sir Lepel Griffin writes that the Sirdhanwalias claim, like most other Sikh Jats, a Rájput descent, but that they have also a close connection with the tribe of Sánsis, after which their ancestral home, Rája Sánsi, seven miles from the city of Amritsar is named. It was to the

CHAP. I. C. — Population.

The Sindhanwálias of Rája Sansi.

Sánsi *got* of Jats that Maharája Ranjit Singh belonged. The Sardár is the son of Sardár Bakhshish Singh, Sindhanwália, who was adopted by his relative, Sardár Shamsher Singh. Sardár Bakhshish Singh, succeeded to the property, and to two-thirds of the jagir, of his adoptive father and remained, until 1884, under the care of the Court of Wards. In that year he attained his majority. In 1875 he was married to a daughter of Sardár Mahtab Singh, of Majitha, and again in 1884, to a cousin of the Rája of Faridkot. He died in 1907 and was succeeded as representative head of the Sindhanwálias and in all his lands and jagirs by his only son Raghbir Singh, who is married to a daughter of the late Mahárájah of Bharatpur in Rájputana. Sardár Raghbir Singh has been accepted as a Provincial Darbari and his right to the title of Sardár has been recognised. He owns 40,392 kanals of land in the districts of Amritsar, Siálkot and Lahore in addition to his perpetual jagir, now worth Rs. 36,934. made up from the revenue of twenty-three villages in Tahsil Ajnála. The value of the jagir has recently been increased by reassessment.

The other members of this family are more notorious than notable. Sardár Thákur Singh, the natural father of Sardár Bakhshish Singh, was for some time an Extra Assistant Commissioner in the province, but resigned, and took up the management of his son's estate under the direction of the Court of Wards. Monetary difficulties, however, soon compelled him to seek the protection of the Court, and eventually, being quite bankrupt, he went to England, and remained nine months as the guest of Máharája Dalíp Singh. In 1886 he returned to French India, and, with his three sons, took up his residence in Pondicherry where he died in 1887. His eldest son, Sardár Gurbachan Singh, who was at one time a statutory civilian in the Punjab, threw up his appointment to join his father, but was subsequently permitted to reside at Delhi, though not to return to Rája Sánsi. The family jagir has been resumed.

Sardár Balwant Singh, Sindhanwália, is a connection of Sardár Raghbir Singh. He holds a jagir in Amritsar and Ajnála of the value of Rs. 5,539. So far he has shown little interest in public affairs.

The Atári family.

The next family of note is that of Sardár Balwant Singh, of Atári, half way between Amritsar and Lahore. His father, the late Sardár Ajit Singh, C. I. E., was for long a prominent figure in Amritsar. He was a grandson of the well known Sardár Shám Singh, Atáriwála, who fell when the passage of the Sutlej was forced after the battle of Sobráon. Sardár Ajít Singh was an Honorary Magistrate and was elected President of the Amritsar Local Board and held the rank of Honorary Assistant Commissioner. He died in 1888, and his five sons came under the care of Court of Wards. Sardár Balwant Singh is his eldest son,

and, with his brothers, was educated at the Aitchison College in Lahore. He came of age in 1894. The late Sardar's property was valued at five lakhs of rupees and the jagir in Amritsar, which has come down to Balwant Singh, is now of the value of Rs. 11,943. Besides this the family enjoys a small jagir revenue in the Gujranwala district. Sardár Balwant Singh married in 1884 a daughter of Sardár Bishen Singh of Kálsia. He takes little interest in public affairs and is reputed to be in constant financial difficulties. Jaswant Singh, the fourth son of Sardár Ajít Singh, received a direct commission in the 11th K. E. O. Lancers and is now a Risaldar. Basant Singh, the youngest son was in the Imperial Cadet Corps and was appointed to the 29th Lancers (Deccan Horse). He died in 1905 and his son, Mahendra Singh, a minor, has succeeded to his jagir.

CHAP. I. C.
Population
The Atár family.

There are two other branches of this family, represented by Nihál Singh and Amar Singh. Nihál Singh is a son of the late Capt. Gulab Singh, of Rai Bareli and grandson of Sardar Chatar Singh, a name well known in connection with the rebellion of 1848. Nihál Singh proceeded to England in 1904 to complete his education at Cambridge University. His property is now worth Rs. 25,000 per annum. Narain Singh, son of Sardár Teja Singh, died in 1906 and was succeeded by his son Amar Singh, whose *taluk* in Oudh is worth about Rs. 25,000 yearly.

The Majithia family.

Sardár Diàl Singh was for many years the head of the Majithia family. He was the son of Sardár Lehna Singh and grandson of Sardár Desa Singh, both men of mark in the Sikh times. On attaining his majority, Sardár Diál Singh was appointed an Honorary Magistrate at Amritsar, but a few years later he resigned and proceeded to England. After his return he lived entirely in Lahore, where he was the chief proprietor of the "Tribune" newspaper and was rarely seen in Amritsar or Majitha. He died in 1893 without issue, bequeathing the whole of his ancestral property in the Amritsar district to his first cousin Gajendra Singh. The latter died in December 1903 at the early age of 43, leaving a widow and an infant daughter. Sardár Diál Singh left the rest of his property, amounting to some 25 lakhs of rupees, to be devoted to various public and charitable purposes. The chief of these bequests were for the foundation of the Diál Singh College in Lahore, for a public library in Lahore and for the endowment of the "Tribune." There was considerable litigation over the will.

To the second branch of the Majithia family belong Sardárs Umrao Singh and Sundar Singh, sons of the late Rája Surat Singh. The Rája was for some time under a cloud, in connection with his share in the events of 1847, and was in consequence removed to Benáres, but he came to the front at the time of the mutiny in 1857, and proved his loyalty by rendering signal service. He was

CHAP. I, C.
Population.
The Majithia family.

severely wounded, and received a large jagir in the Gorakhpur district in the United Provinces. In 1861 he returned to the Punjab, and was invested with civil and criminal powers at Majitha, receiving the title of Rája. He died in 1881. His two sons received an excellent education at the Aitchison College.

Sardár Umrao Singh resided in Lahore for some years. He was for a time manager under the Court of Wards of the Estates of the Atari family, with which he is connected by his marriage with the daughter of Captain Guláb Singh. He has since married a Hungarian lady and now resides in Austria. His eldest son, Balrám Singh, was for sometime aide-de-camp to His Highness the Máharája of Kashmir. Sardár Sundar Singh married in 1887 a daughter of Sardár Bishan Singh of Kandaula in the Ludhiána district, maternal uncle of the Rája of Faridkot. On her death he married a daughter of Sir Atar Singh, K. C. I. E., Chief of Badaur in the Ludhiána district. He is a fellow of the Punjab University, a member of the Provincial Legislative Council and has received the title of Sardár Bahádur. He was for some time Honorary Secretary of the Committee of the Khálsa College, Amritsar.

The head of the third branch of the Majitha family is Bíja Singh; he and his sons live a very retired life, but his brother, Bishan Singh, a pensioned Risaldar of the 10th Bengal Cavalry, is a man of considerable influence. Sardár Kahn Singh, uncle of Bíja Singh, was an Honorary Magistrate; he died in 1888, leaving two sons, Pritam Singh and Pargat Singh, who were educated at the Aitchison College, Lahore. The former received a direct commission in the 23rd Sikh Pioneers and is now a Subedar and the latter is a member of the Municipal Committee, Majitha.

The Kalianwáia Naharnas.

The Kalianwála family, which takes its name from the village of Kála Ghanupur, is at present represented by Sardár Gulzár Singh, who was adopted by the late childless Sardár Lál Singh. They are not Jats, but members of the Naharna, or barber caste and the only link between them and the great Sardár Fateh Singh Kaliánwála of the Sikh times is that of adoption. Lál Singh was the son of Attar Singh, who was a member of the Council of Regency. He lived a quiet life, and was devoted to hawking and other sports. He died in 1888, and being childless and the right of adoption not being recognized in this family, his jágír should have lapsed. But, by the strenuous exertions of Sir Charles Aitchison, sanction was at length, after more than one refusal, obtained to the devolution of the jágír on the adopted son Gulzár Singh. The Sardár was educated privately and resides at Kála. He is an Honorary Magistrate and a Provincial Darbari. In addition to his jágír, which amounts to Rs. 14,600 a year, he has other property in land and houses.

CHAP. I. C.

Population.

Bhái Gurbakhsh Singh.

The family of Bhái Gurbakhsh Singh, son of Bhái Pardumán Singh, has always taken a lead in the management and up-keep of the Darbár Sáhib at Amritsar. It originally belonged to Chiniot in the Jhang district. Bhái Pardumán Singh always took a great interest in the decoration and repair of the Darbár Sáhib, and had charge of Jágírs to the amount of about Rs. 4,000 per annum realised in perpetuity for the support of the temple. He was a man of great energy and public spirit, and took a keen interest in all that concerned the affairs of the temple and city generally. He died in 1875. Bhái Gurbakhsh Singh has been recognized as his father's successor, and has received the vacant chair in Viceregal Darbár, to which his father was entitled. He was carefully educated under the Court of Wards ; in 1897 he went to England and was called to the Bar in 1900. He is at the present time Honorary Secretary of the Khálsa College Committee, Amritsar, and has succeeded his father in the charge of the repairs of the Darbár Sáhib.

The fam of Sir Sáhib Diál, K.C.S.I.

The representatives of the family of Rája Sir Sáhib Diál, K. C. S. I., are his grandsons, Thákur Har Kishen and Thákur Mahan Chand. Under the Sikh rule Sáhib Diál and his father Misr Rallia Rám held charge of the customs department. The former continued to occupy this post after annexation, and in 1851 received the title of Rája. He was appointed a member of the Legislative Council in 1864, and was soon afterwards knighted. His two sons both died in his lifetime, and only his two grandsons were left on his own death in 1885. The family Jágír (worth in Amritsar Rs. 3,395) passed to the elder grandson, who resides at Kishankot in Gurdáspur district of which place he is an Honorary Magistrate. He is also a Provincial Darbári. The second grandson, Mahan Chand, was educated at the Aitchison College, and lives in Amritsar. He was appointed an Honorary Magistrate in 1892, an Honorary Extra Assistant Commissioner in 1902 and a Member of the Punjab Legislative Council in 1906. In all these capacities he has done much useful work and is one of the most generally respected citizens of Amritsar. He is a Provincial Darbári and was invited to the Delhi Coronation Darbár as an official guest. He owns land in Amritsar and Lyallpur and is Honorary Registrar of the former place. Sardár Harcharan Das was the youngest brother of Sir Sáhib Diál, and was long an Honorary Magistrate in Amritsar. He was well known for his benevolence and liberality, and the serai on the Grand Trunk Road near Gharinda was built at his expense. He died in 1884, and his jágírs in Amritsar and Gurdáspur lapsed to Government. His son Kishor Chand lives in Amritsar, where he owns considerable property. The late Sardár Bahádur Lachmi Sahái was the eldest son of Misr Gián Chand, brother of Sir Sáhib Diál. Gián Chand was, in the Máharája's time, at the head of the office of salt revenue at Pind Dádan Khán, and under the British Government he was

CHAP. I, C. Population.

The family of Sir Sáhib Diál, K.C.S.I.

appointed Tahsíldár of that place, but this post he resigned, and he was then appointed an Honorary Magistrate at Amritsar. He died in 1878 and Sardár Lachmi Sahái became the head of the family. He was an Extra Assistant Commissioner in the Punjab, and received the title of Sardár Bahádur in 1894. As a Provincial Darbári, he was invited to the Coronation Darbár as an official guest and received the Darbár Medal. He died in 1913 at the age of 80. His elder son, Devi Sahái was employed for some years by the Kashmir Darbár. His younger son, Jowála Sahái, B. A., is now an Extra Judicial Assistant Commissioner and has been working as a District Judge for some years.

The Gils of Naushera.

Sardár Bahádur Arur Singh is a Jat of the Shergil branch of the *got* Gil, and resides in Naushera, a few miles out of Amritsar on the Majitha road. The Sardár, who was during his minority a Ward of Court, has been well educated, is a member of the Amritsar Local Board, and an Honorary Magistrate of the first class. He is a Provincial Darbári and Manager of the Golden Temple, a position to which considerable influence and responsibility is attached, and for his services in this capacity was made a Companion of the Order of the Indian Empire in 1913. In addition to the family jágír he owns 33 squares of land in the Canal Colonies and about 800 *ghamaos* in Amritsar. The family came into importance on its chief members joining the Kanháya confederacy, the result of which was that one of them, Mirza Singh, obtained several villages in Gurdáspur district. The revenue of these now constitute the jágír of the family. Only two wells and a garden are held revenue free at Naushera in Amritsar.

The Mán family.

This family is of the same descent as that of the Mán Sardárs of Moghal Chak in the Gujránwála district. The Amritsar branch has long been settled at Mánanwála in the Amritsar district. Sardárs Sardul Singh and Jawála Singh, sons of Sardár Fateh Singh, a leading man in the time of the great Máharája, saw a great deal of service, but their fortunes varied much, and at annexation they found themselves provided with a jágír far smaller than that once held by the family. Sardár Sardul Singh had two sons, the elder Partáb Singh died in 1910 and the younger, Jíwan Singh, who was for long regarded as the representative of the family, died in 1911. He was a member of the Local and District Boards and a Divisional Darbári. He has been succeeded by his son Atma Singh, a young man of some promise. Sardár Jawála Singh's second son, Hira Singh, was a member of the District Board and Chairman of the Amritsar Local Board. He was a Divisional Darbári and died in 1898 leaving three sons, amongst whom his share of the property is divided.

Sardár Bahádur Thákur Singh Bhangi.

Sardár Thákur Singh, a resident of Panjwár in the Tarn Táran tahsil, is lineally descended from Hari Singh, the founder of the Bhangi *misl*, whose fondness for *bhang* is said to have given its name

CHAP. I. C.
Population.

Sardár Bahádur Thákur Singh Bhangi

to the confederacy. Hari Singh's head-quarters were at Sohál, a large village near Panjwár, whence he overran much of the adjoining country. The overthrow of the *misls* by Ranjít Singh and the Sukar Chakia and Kanháya *misls* is matter of history. Sardár Thákur Singh is now the head of the family, whose importance has declined. He is known as a respectable and energetic rural notable, owning a large holding in Panjwár, and he has done good service as zaildár of the Dhillon zail, and enjoys a seat in Provincial Darbárs. He is also a member of the Local Board of Tarn Táran and of the District Board of Amritsar and his good work in these capacities has been rewarded by the conferment in January 1914 of the title of Sardár Bahádur. He and his brother Hákim Singh enjoy a Jágír yielding Rs. 240 per annum and own about a thousand *ghumaos* of land.

The Rasúlpuria family.

Another well known notable of the Tarn Táran tahsíl was the late Sardár Sant Singh of Rasúlpur. His grandfather was Risáldár Punjáb Singh, one of the most distinguished soldiers of the time of the mutiny. Punjáb Singh was succeeded by his son Jowála Singh, who added to his small holding in Rasúlpur by purchase and mortgage, and also owned a large share in the estate of Bír Rája Teja Singh (granted by Governmnet to his father) besides large estates in Oudh. He was a Zaildár and a member of the District Board; and though he did not serve in the army himself, he had several relations in service, who kept up the good name of the family. It is connected by marriage with most of the Jat families of note north of the Sutlej, and is in every respect worthy of consideration. Sant Singh, the eldest son of Jowála Singh, served for 15 years in the Central India Horse, retiring as Risáldár. He was then appointed an Honorary Magistrate. Besides his share of the property in Oudh, he owned twenty squares of land in Gujránwála and about 275 bighas in Amritsar district. He died in 1913, leaving two minor sons. His younger brother, Sardár Jogendra Singh, was for some years Home Minister of Patiála State.

Other notable families

Other gentlemen who deserve mention in this record are noted below. Sardár Bishan Singh, Rámgarhia, whose grandfather Sardár Mangal Singh, C. S. I., was manager of the Golden Temple, is an Inspector of Police and a Divisional Darbári. He is the representative of the once famous Rámgarhia *misl* and the family has a distinguished military record and still enjoys a substantial jágír. Sardár Chain Singh of Hirapur in Tarn Táran is an Honorary Magistrate and belongs to a Khatri Sikh family with large estates in Oudh and the Punjab. His maternal grandfather was Rája Híra Singh, an officer who did excellent service in the Mutiny and in China. He was a generous friend of the poor and a liberal landlord, and his grandson follows his example in both respects. Sardár Chain Singh is a Darbári and holds land in Oudh and has a grant of land in the Chenab Colony. Bishan Singh is the head of a Gil Jat village resid-

CHAP. I.C. Population. Other notable families.

ing at Chhina in the Ajnála tahsíl, a few miles from Rája Sánsi. Many members of this family have served in the Army, and two of Bishan Singh's sons obtained direct commissions. Bishan Singh himself has been of great assistance in obtaining recruits. He is connected by marriage with many of the good Jat families and is a man of considerable local influence. Another Sikh family of the Gil Jat *got* is that descended from Colonel Wazir Singh, who was at one time Governor of Kashmír and fought against Mul Ráj at the siege of Multán. His grandson Sardár Bahádur Risáldár Partáb Singh retired after 23 years military service with a military pension and medals for the Abyssinia and Afghanistan wars. He then became an Extra Assistant Commissioner, retiring after 19 years service as a civil pensioner with the title of Sardár Bahádur. He was given a grant of land in the Lyallpur Colony where he now resides. The home of the family is Kakkar in the Ajnála tahsíl. Sardár Partáb Singh was for three years President of the Council of Regency of the Farídkot State. He is now an Honorary Magistrate in Lyallpur and a Provincial Darbári. He was a Government guest at the Coronation Darbár of 1911. His son Sardár Gur Partáb Singh received a direct commission as Jamadár in the 16th Cavalry in 1906, but in 1910 was enrolled as an Extra Assistant Commissioner and is now acting as Revenue Assistant in the Amritsar district. Sardár Partáb Singh's younger brother Sardár Sant Singh Bahádur is Risaldár-Major of the 5th Cavalry, the latter's elder son received a direct commission and is a Jamadár in the 19th Lancers. Sardár Sádhu Singh of Kakkar, a son of Colonel Wazír Singh's younger son, is at present Sub-Registrar of Ajnála and takes a keen interest in all public affairs. Many other connections of this family are in Government employ, principally in the Native Cavalry Regiments. Sardár Harnám Singh of Aima in Tarn Táran is Sub-Registrar of that tahsíl and a member of the District Board. He owns considerable land, besides house property in the city. Other families mentioned in Griffin's Punjab Chiefs are those now represented by Bhagwán Singh of Chamiári, Gurdit Singh of Chapa, Asa Singh of Bhilowál and Amar Singh of Tung. The families of these gentlemen all have histories of some distinction, but are now of purely local importance. Among the best known men of the *Choudhri* class may be mentioned the following Zaildárs: Ishar Singh of Sahnsra, Duráb Khan of Kohála and Ináyat Ulla Khán of Sarangdeo, all in the Ajnála tahsíl; Santa Singh of Dollu Nangal, Chanda Singh of Jandiála, Nabi Bakhsh of Fatehpur, Allah Bakhsh of Tárpai and Tahl Singh of Kathu Nangal, who belong to Amritsar tahsíl. In Tarn Táran prominent Zaildárs are Sardár Thákur Singh of Kasel, Khushál Singh of Nagoke, Niámat Khán of Vairowál and Partáb Singh of Raniwála. There are many retired native officers residing in the district who take an active and intelligent interest in public affairs. Among these may be mentioned Risáldár-Major Sardár Bahádur Buddha Singh, late of the 19th Lancers (Fane's Horse), who sits as

CHAP. I, C.
Population.
Other notable families.

an Honorary Magistrate at Jhalári in the Amritsar tahsil, and Risaldar-Major Harnám Singh, Bahádur, Zaildar of Atári. Both these gentlemen are members of the District Board. Subadar-Major Gurdit Singh of Dhotian in Tarn Táran is keenly interested in education, and only considerations of space forbid the further enlargement of this list of gentlemen who in various ways assist the officers of Government.

Religion.

Table 16 shows the numbers of males and females, and the distribution by Tahsils of the urban and rural population, who follow each religion, as ascertained at the Census of 1911. Further details will be found in the Provincial Census Report, Tables *VI* and *XVII*. The distribution of every 10,000 of the population by religion is given below :—

	1881.		1911.	
	Urban.	Rural.	Urban.	Rural.
Hindus	3,949	2,696	3,753	2,083
Sikhs	970	2,771	1,372	3,242
Jains	15	1	70	3
Muhammadans	5,016	4,532	4,730	4,622
Christians	49	...	72	50
Zoroastrians	...	...	3	...

	Totals.	
	1881.	1911.
Hindus	2,939	2,404
Sikhs	2,422	2,883
Jains	3	16
Muhammadans	4,626	4,642
Christians	10	54
Zoroastrians	...	1

On a comparison of the two sets of figures the chief difference observable is a falling off of 535 per 10,000 under the head of Hindus, which is almost balanced by an increase of 461 per 10,000 under the head of Sikhs. This is probably due to a more strict classification of Sikhs at the latest census, or possibly to the cleavage between Sikhs and Hindus having been accentuated in recent years. There is an increase of 13 under Jains, of 16 under

CHAP. I. C.
Population.

Muhammadans and a large rise of 44 under the head of Christians. Persons professing the Christian religion have increased from 959 in 1891 to 4,763 in 1911.

Ecclesiastical Administration.

Amritsar is within the Lahore Diocese and there is an English Church in the Civil Station and usually a resident chaplain. There is also a Roman Catholic Church. The principal Mission is that conducted by the Church Missionary Society, an account of whose activities, furnished by the Revd. C. L. R. Richards, is given below :—

The cause of education, and especially female education, has been greatly furthered by the efforts of the Amritsar Mission of which a detailed History is contained in a book entitled "The Mission of the C. M. S. and C. E. Z. M. S. in the Punjab" by Robert Clark. The Amritsar Mission was established in 1852, at the time when Mr. Saunders was Deputy Commissioner. It was by his efforts that the Station Church of St. Paul's was built in the following year. To this building the Mission now makes no claim, and it is kept up by Government, for in 1862 a separate Mission Church was built by subscription near the Rám Bágh Gate of the City. This has been since enlarged at three different times. A branch of the Mission was established in Jandiála in 1854. An orphanage (since removed to the Christian village of Clarkabad) was built in Amritsar in 1855, and schools in the City founded in the following year, in memory of Lady (Henry) Lawrence. The extension of the work led to the foundation of other branches in Majitha, Tarn Táran, Ajnála, Bahrwál and Uddoke on the Batála border.

In Amritsar itself there is the Alexandra High School built in 1877, for Indian Christian Girls of the better class, to which since 1907 a certain number of children of other religions have been admitted as day scholars. To this school belongs the honour of having passed the first female candidates in the province in the Matriculation Examination, and in the Junior Anglo-Vernacular Teachers' Examination. The numbers are now over 60 boarders and between 20 and 30 day scholars. Among the Darbar honours of 1912 was a silver Kaiser-i-Hind medal awarded to an old pupil of the Alexandra School for work among the cholera stricken in Bengal.

There is also in Amritsar a Middle School for Christian girls in which there are now close upon 100 girls. It occupies a masonry building on the Jullundur road, erected in 1870 by the Christian Vernacular Educational Society, as a normal school for the training of teachers ; but this society withdrew from the Punjab in 1875.

A medical Mission was established by the Church Missionary Society in 1882. It has branch dispensaries at Sultárwind, Beás Jandiála and Rám Dás, while ladies appointed by the Church of England Zenána Missionary on medical work in Amritsar in St. Catherine's hospital and also in Tarn Táran, Ajnála and Bahrwál near Atári.

CHAP. I, C.
Population.
Ecclesiastical Administration.

St. Catherine's Hospital for women is supported by the Zenána Missionary Society. The Hospital is within the City near the Máhan Singh Gate, having been removed from its original site near the Hall Gate in 1908. The Hospital buildings are entirely new and consist of three blocks built round an open space. It includes accommodation for about sixty in-patients with private and maternity wards and operating rooms. Behind the wards is an out-patient block consisting of an open air shelter, two consulting rooms, dressing rooms and dispensary. There is a resident staff of four English ladies, including two Doctors and a nurse, also a Christian Sub-Assistant Surgeon, dispenser and fourteen women and girls in training. In connection with the Hospital is the Municipal School for *dais*. There are 34 certificated and 15 uncertificated *dais* practising in the city under the supervision of the Hospital. Statistics for 1912 were :—

In-patients	9CC
Operations	878
Out-patients—New cases	10,942
Return visits	21,353
Midwifery cases	3,001
Visits to patient's houses	3,574

At the end of 1913 there were on the staff of the Amritsar Mission and District five European clergy, one of whom also holds a medical degree, two lay-workers and a doctor, seven Indian clergy and a large number of Indians agents. In addition, twenty-six English lady missionaries, assisted in all departments of their work by Indian helpers, work in connection with the Church Missionary Society and the Church of England Zenána Missionary Society, the latter Society being especially responsible for the work in the Zenánas, the women's hospitals and girls' schools of Amritsar and the district. The Mission High School in the City and the Middle School in Majitha are both in a flourishing condition. The former celebrated its Jubilee in 1902.

Occupations.

Table No. 17 shows the principal occupations followed by males and females as returned in the 1911 Provincial Census Report. The figures also give the numbers of actual workers and dependents in each occupation. Out of a total population of 880, 728 and a rural population of 711, 530, 129, 908 persons are engaged in pasture and agriculture, and their dependents number 213, 480, making a total of 343, 388 or over 48 per cent. of the rural population. The combination in one person of several occupations makes the classification somewhat unsatisfactory, but the adoption at the last Census of Monsieur Bertillon's classification has overcome many of the difficulties. More detailed figures will be found in the Census Report of 1911, Tables *XV*, *XVI* and *XVI* A, and a full account of the methods and difficulties of enumeration in Chapter *XII* of that Report.

Food.

The ordinary food of the people consists of cakes of meal, made of wheat when they can afford it, maize in the cold weather, or

CHAP. I, C. Population. Food.

jowár or mixed wheat and gram. *Bájra* is neither grown nor eaten to any extent. The very poorest, especially in Ajnála, content themselves with *maddal* when they can get nothing else. These cakes are eaten with *dál*, or pottage of gram or pulse, and *lassi*, or butter-milk, is the usual drink. Salt is always used and *mirch* or red pepper is mixed with the *dál*. If vegetables are eaten, they are generally in the form of green rape (*sarson*), less frequently carrots, onions, or turnips, grown by Aráins and other Muhammadans and sold in other villages. Raw milk is not liked and rice is only used during sickness, at festivals, or by the richer families. Sugar in various forms makes its appearance at marriages or festive occasions, but this and clarified butter (*ghi*) are luxuries. Before starting to his work in the morning, the Jat will have a light meal to break his fast, but a more substantial meal of cakes and *lassi* is brought to him in the fields by the women or children, when the sun begins to get powerful and the oxen have their midday rest. Work is then resumed in the afternoon in winter, or about four o'clock in the summer, and the heaviest meal of the day is taken at sun-down in the house when the day's work is over. Rájputs and other races, who seclude their women, cannot have their food brought to them in the fields and lose time by returning home, having already lost time in the morning by meeting for a smoke after prayer, at the village gateway. With a Muhammadan the pipe is always within easy reach whatever work he is doing, and there is little doubt that this habit is a serious check on the industry of the Muhammadans and Sultáni Hindús, and places them at a disadvantage with the Sikhs.

Dress.

The dress of the Hindu or Sikh cultivator is simple in the extreme. The material is almost always unbleached cotton made up by the village weaver from home-grown materials spun by the women of the family and supplied to him. The *pagri* is universally worn as a head covering along with a loose sleeved jacket, and a cloth wrapped round the loins kilt-fashion. In place of the jacket, and sometimes in addition to it, a light wrap may be worn over the shoulders which can be easily thrown off. Rough shoes of the usual pattern are worn. They last about six months. But when at work the jacket or wrap are often discarded, and, it may be, the *pagri* as well. The loin cloth is seldom thrown off, but village menials may be seen satisfying the requirements of decency with a simple breech-clout. In winter, all but the poorest wear a heavier double-folded cotton wrap, which may be worn over the head; *pyjámás* or trousers are a hindrance to those who work with their own hands, and the wearing of them is usually the sign that the man is in military service or can employ others to work for him. The Sikh breeches (*kach*) are not often seen. Old men still keep up the custom, and men of the Kuka sect, Nihangs, Bháis and Sodhís almost invariably wear them, but others substitute the loin cloth.

Muhammadans affect colours more than the Hindús, especially in Ajnála. With them the loin cloth is often of a red or olive green check, the latter being a favourite colour with Gujars, the former, though the colour is one more often associated with Hindús, is worn by Aráíns. The red *pagri* is sometimes worn by Hindús, particularly Kambohs, but is never worn by Muhammadans. Nor is the custom of wearing a coloured under *pagri* or *sáfa* common in Amritsar. This almost invariably marks the Hindu Jat from the Málwa. Woollen clothes are not commonly worn, nor can the bulk of the people afford them. Among the Sikhs, Nihangs usually carry a brown blanket with a red striped border, and the Awáns are often seen with a striped blanket in the winter, similar in pattern to those worn in the Upper Punjab, but these are exceptions. Otherwise only the wealthier men can afford to wear woollen clothes.

CHAP. I. C.
Population.
Dress.

In Amritsar city and the larger towns the wealthier inhabitants have adopted some portions of European attire and many more have their garments made from European cloth. In particular, European types of shoes and boots are very much in demand.

Dress of women.

The dress of the women is brighter, and there is always some colour in it. A wrap is always worn over the head and it is considered indecent to appear in public without it. With this are worn a loose jacket coloured red or blue, or of some printed cotton stuff, and either an ample pair of blue striped *pyjámás*, tight at the foot, or a petticoat. Sometimes the petticoat, the favourite colour for which among Hindu women is red or brick-dust, with a yellow or green border, is worn over the *pyjámás*, more especially in cold weather or when going from home. On the actual journey the petticoat may be hitched up or even carried over the arm. The *angi* or bodice, when worn, is affected by married women, especially Aráíns and Changars, but is not common. The *chádar* or head wrap may take the form of a *phulkári*, a cotton cloth of black or red ground with a flowered pattern embroidered in floss-silk. In the hot weather the wrap may be worn by older women as a covering for the head and shoulders without the red or blue jacket. In the towns the dress is far more varied, but the petticoat is more common than the *pyjámás* among the women of the Hindu trading classes, and purple with or without a yellow border is a favourite colour.

Ornaments.

The women, unless widowed, are usually loaded with silver ornaments, worn on the ears, neck, arms and ankles, and much of the wealth of the family is invested in them. At a marrige no bride's outfit is complete, unless she is provided with the ornaments usually worn by her class. Among the men, ornaments are rare, but those who have saved money often invest it in the shape of a string of gold *mohurs*, worn round the neck, a tighter necklace of hollow gold beads, or even a pair of gold bangles being worn when

CHAP. I, C. Population. Ornaments.

it is wished to make a show. Pensioners from the army, the Burmah Military Police, or service in Hong-Kong are especially fond of displaying these and they may be noticed among the Sikh Jats of Tarn Táran, with whom service away from home is commonest.

Dwellings.

The villages in the district are almost always composed of houses built of sun-dried bricks, or of large clods of caked mud taken from the bottom of a pond. But there are few villages which do not also contain one or two masonry houses, the home of a well-to-do headman, of the village money-lender, or of a pensioned native officer. The houses are crowded together as closely as they can be, separated by narrow winding lanes, a few feet wide. It is not always the case that there is a lane leading right through from one side to the other. Often the houses of one *pattí* or subdivision lie together, having a separate entrance with a gateway. These gateways in the best Sikh villages are commodious structures, with a roofed shed to right and left of the entrance, the roof extending over the entrance itself, the floors of which are raised two or three feet above the level of the pathway running between. In these travellers are housed, and the owners of the *pattí* meet when the day's work is done, sitting on the matting spread on the floor, or on the large wooden bedstead which is often found in them. These gateways may have an ornamental front, and if in a good state of repair, they mark the well-to-do village. Between the actual buildings and the cultivated fields is an open space running right round the village, sometimes shaded by *pipal* trees and almost always filthy. Carts, which would take up too much room inside the village, stand here, and it is here the canepress will be found at work in the winter. At one or more sides of the village will be found ponds from which earth is excavated for repair of houses, where cattle are bathed and watered, and in which hemp stalks are soaked, and disused well and cart-wheels sunk to keep the joints of the wood from shrinking. The backs of the houses are usually blank walls forming an outer wall to the village. In the space running round the village are found the manure heaps and stocks of fuel-cakes of dried cow-dung belonging to each house. The space used for storing these is, as a rule, limited, and disputes as to the right to occupy a particular site for a dung heap are keenly fought out.

Entering the village we find the doorways of the houses opening on the main streets, or side lanes running off them. Ordinarily the front door leads straight into an open courtyard, with troughs along one or more of its sides, at which cattle are tied. The dwelling-houses will generally be found along the side of the courtyard which fronts the doorway. These are long and narrow, with or without a small verandah in front, and are generally provided with a flight of steps or a wooden ladder giving access to the roof. Windows there are none ; light and air are admitted by

CHAP. I, C. Populatoin. Dwellings.

the door, and smoke finds its way out in the same way, or, by a hole in the roof. But cooking is carried on for the most part in a partly-roofed shelter in the corner of the yard, for the people live as much as they can in the open air, and are only driven in-doors by cold or rain. A noticeable object in every house is the large jar-shaped receptacle for the grain of the household made of plastered mud with a stoppered hole, low down in the side, for the grain to run out. Each family, living within the enclosure, has a separate dwelling-house and cooking place, while, in the yard, outside the doors, much of the available space is taken up by the bedsteads and waterpots of the household, and the spinning wheels of the women. The roof is used for storing heaps of *jowár* fodder, and bundles of cotton twigs for roofing purposes, also for drying chillies, maize cobs and seedgrain in the sun. Occasionally there is a small upper chamber on the roof, but this is rare. Sometimes the front door, instead of leading directly into the yard, leads into a lodge or *deorhi* out of which again a smaller door, placed so that the interior of the yard cannot be seen into from the street, leads into the yard. The *deorhi* will only be found in the houses of well-to-do *zamindars*, or in houses which have been built outside the village in open ground for want of room within. It is not often space can be spared for it in the crowded lanes. It is used for stalling cattle, storing fodder, ploughs, yokes and other implements, or as a guest house for those who may not be admitted within. If the owner is well off, the outer gate of the *deorhi* may be set off by a cornice of carved wood or even a front of masonry. But the *deorhi* is not so common as in parts of the province where land is of less value, and where the villages are more roomily laid out. Economy of space is everything in a highly irrigated district like Amritsar, and the Sikh or Muhammadan Jat will submit to much inconvenience in the matter of house room, before he will sacrifice part of his cultivated fields to build himself a better house outside. Some are forced to build separate houses at the wells, but this is a last resource, and there is not the tendency found in other parts of the province to scatter into detached hamlets, and leave the parent site.

Those of the village menials whose trade or habits are unobjectionable live within the village site in smaller houses, built originally on land given them by some owner under whose protection they settled in the village. Carpenters are often better housed, usually at the outskirts of the village, and are the most comfortably off of all the village menials. But *chuhrás*, *chamárs*, and leather-workers have an *abádi* for themselves at the outskirts of the village, being held unclean. Instances may be met with where the owners have combined to take up cultivated land at considerable expense, and make it over to the *chuhrás*, in order to provide these indispensable menials with a site at a convenient distance. As a rule, the houses of Muhammadans are more densely packed and have smaller yards

CHAP. I. C. Population.

and lower walls. And in the Ajnála. Bet the houses are small, more rudely built, and less comfortable.

Dwellings.

Almost every village, and in large communities, every *patti* has its guest-house, known as a *dharmsála* among Hindús, or as a *takia* among Muhammadans. This is in charge of a *sádhu*, or, ascetic, or, with Muhammadans, of the village *Kázi*, who also officiates in the mosque. *Dharmsálás* are always kept scrupulously clean, and in most of them a copy of the Granth Sáhib, or sacred book, is kept. This is placed at a window, whence the *sádhu* in charge reads aloud to himself, or to those who care to listen. The *dharmsála* is a well built structure, and is often endowed with a small piece of common land set apart for its maintenance. Muhammadan *takias* are less pretentious structures, and may be only a shed for travellers, fortunate if it has a door. Fire is kept burning for those who wish to smoke, and there may be a well. They are worth the small endowments, allowed by Government for their support, if only for the sake of preserving the shady trees which are the especial care of the man in charge. The ruined tomb or *khangah* of some byegone saint, decked with flags and with a recess for a small oil-lamp, will often be found beside it, and it is usually close to the village mosque. Hindu Jats who worship the saint Sarvar Sultán keep up the dome-shaped *makáns* which perpetuate his memory, but these are indifferently cared for. *Shiválás* or Hindu temples are not found, save where there is a colony of Hindu traders, but *thakurdwárás* are more common. In a few villages Jogis, reverenced by Hindús and Muhammadans alike, have established an *asthán* or monastery.

Disposal of dead.

Hindus, who are not Aryas, and non-orthodox Sikhs burn the bodies of their dead; the bones and ashes are carried home and on the fourth day sent to the Ganges. For thirteen days the members of the family and near relatives (up to the seventh degree) are considered impure and no one eats in their house. After this period *kirya kirm* is performed, the Brahmins are fed and the custom of *dastar bandi*, or formal recognition of an heir to the deceased, then follows. After periods of 6 months and one year have elapsed, the Brahmins are again fed, as this is considered to be of great benefit to the departed soul. Orthodox Sikhs (Jats and others) and Aryas do not observe these customs; the dead bodies are burnt and the ashes are thrown into the nearest tank, river, canal or pool. Some Sikhs, however, dispose of the bones only in one of the sacred tanks of Amritsar, Tarn Táran or Sangrána Sáhib. Muhammadans wash the bodies of the dead before burial. Prayers are recited for the good of the departed spirit. After the third or sometimes the fourth day, the rites of *kul* are performed, passages of the Koran being read and the poor fed. The ceremony of *cháliswan* takes place in a very similar way as in the case of *kul* after a period of forty days, but is performed on a grander scale; for this the relatives

and friends of the deceased are summoned together and given food. CHAP. I. C. Population.

Amusements and Festivals.

The daily life of the ordinary cultivator is rarely free from monotony, and is one continuous round of labour. Canal irrigation has made some difference in this respect, enriching those who are fortunate enough to obtain it, and allowing them to employ menials as farm labourers (*háli* or *átri*). It has also relieved much of the incessant work on the wells, which is monotony itself. In a district where nearly all the available waste has been broken up, and grazing is scarce, the cattle are a constant care. Some one member of the family must always be at home to cut the fodder, chop it and feed it to the working cattle, for it is only the milch cattle, and especially the buffaloes in milk, that are looked after by the women. Of amusements they have few. There is the fair at Tarn Táran at the end of each lunar month, and the great fairs at Amritsar on the Dewáli and Baisákhi holidays. After the day's work is done the younger men may be seen wrestling, competing at the wide jump, or with heavy wooden weights near the *dharmsálá* or by the village gate. Marriage festivals come round, and visits of condolence have to be paid, but the breaks in the round of labour are few for the men and still fewer for the women, on whom devolves all the household work, the milking of the cattle. the cooking, the picking and spinning of the cotton, besides the care of the children.

The European games of cricket and hockey have become very popular of late years. In Amritsar itself there is great excitement yearly over the inter-schools sports tournament, which is generally held early in February, and in the district it is now quite a common sight to see the children playing cricket even in small and out of the way villages.

The principal fairs are those held at the Baisákhi festival in April and at the Dewáli in November, both at Amritsar city. They are primarily religious fairs, but gradually the meetings came to be utilized for the buying and selling of agricultural stock, and now the fairs are the best known and most largely attended in the province. Further details will be given in the chapter on agricultural stock and produce. On these occasions all the *bungás* or hospices, originally kept up, round the tank of the Durbar Sáhib, by leading families for the accommodation of their following on the occasion of their visits, and all the semi-religious *akhárás*, or rest-houses, in the city are filled to overflowing, and representatives of every race in the Punjab and beyond its borders may be seen. Special trains for the accommodation of the visitors to the fair are run, and all the main roads leading to Amritsar city are crowded with the cattle being driven in for sale. Each fair lasts about ten days and during all that time the cattle are coming and going. Prizes to the value of about Rs. 2,600 are given for cattle and about Rs. 600 for horses and mules. There is a

CHAP. I. C. Population. Amusements and Festivals.

Government contribution of Rs. 2,750 at both the Baisákhi and Diwali fairs. Several other fairs are celebrated in the district, all of a religious character. Two large fairs are held at Tarn Táran, one in March and the other, the largest, in August, and throughout the year, as already stated, there is a gathering at the same place on the last day of the old moon and first day of the new. Another religious fair is held at the Rám Tirath tank at Kalér, on the borders of the Ajnála and Amritsar tahsíls, on the Gujránwála road. This is more a Hindu than a Sikh fair, and is largely attended by Hindús from the city. Others again are held at the Báoli Sáhib, or sacred well at Goindwál, in September, at the shrine of Guru Angad in Khadúr Sáhib, (both in Tarn Táran) also at Chamba Khurd in the same tahsíl. The principal Muhammadan gathering is at Kotli Shah Habib, the shrine of a saint near Rámdás in Ajnála, but there is scarcely a single Muhammadan shrine to which the custodians do not seek to add importance, by the holding of a small local gathering for their own, or the saint's profit.

Names and Titles.

There are no names and titles peculiar to the district; the ordinary Hindu and Muhammadan names in use are found in all the Central Districts of the Punjab.

CHAPTER II.—ECONOMIC.

Section A.—Agriculture.

Area of cultivation.

Table 18 gives the surveyed and assessed area in acres for the district and the three tahsils. It is divided as follows:—

	Per cent.
Cultivated	76
Culturable waste	11
Forests and other unculturable waste	13

Soil classification

The land under cultivation was classified as follows at the recent settlement:—

Chahi.—Land regularly irrigated from a well. In case of doubt, if a field is shown by the *khasra girdawari* to have been so irrigated in two or more out of the last eight harvests, it has been recorded as *chahi.*

Nahri.—Land regularly irrigated from the Bari Doab Canal, *i. e.*, in two or more of the last eight harvests, provided that such land does not come within the definition of *chahi.*

Abi.—Land watered from tanks, *jhils,* ponds or drainage channels.

Sailab.—Land usually flooded in the rains by the Beas, Rávi or Sakki, or their branches, or land near these rivers which is always moist.

Barani.—All cultivation not included in the above classes.

The annexed table shows the proportion of land in each tahsil of the above classes, together with the total cultivated area of each tahsil:—

	Chahi.	Nahri.	Sailab.	Barani.	Abi.	Total cultivated area in acres.
Amritsar ...	36	24	·1	39·7	·2	280,112
Tarn Taran ...	16·5	47	2	34·5	...	316,511
Ajnala ...	43·6	23·9	12·1	20	·4	161,288
District ...	29·5	33·6	3·4	33·3	·2	757,911

Irrigated area.

The irrigated area at present is 60·3 per cent. in Amritsar, 65·5 per cent. in Tarn Taran and 80 per cent. in Ajnala. Thus 66·6 per cent., or two-thirds of the whole cultivated area of the district, is irrigated.

CHAP. II.A.
Agriculture.
Rainfall.

The northern boundary of the district is only some 40 miles from the Himalayan foot-hills and the district is classed as submontane. The annual average rainfall is between 23 and 24 inches of which about 75 per cent. falls in the monsoon and the remainder in the cold weather. The southernmost tahsil, Tarn Taran, has for the last few years enjoyed heavier rainfall than the other two tahsils and this has been attributed to the prevalence of canal irrigation, which, by increasing the number of trees and the luxuriance of the natural vegetation, has in turn had an influence on climatic conditions.

As regards the effects of a failure of the monsoon, the district is on the whole as well protected as any in the Province. Such a failure would only result in a shortage of fodder and pulse crops and would have little effect on the more valuable staples; to these an excessive monsoon, such as occurred in 1908 and 1909 would be more dangerous owing to the resultant flooding of the low-lying tracts in the Nahri circle of Amritsar and Ajnala and in the western part of Tarn Taran. Large areas of cultivated land, which were abandoned after the monsoon of 1908, have not yet been brought under the plough. The winter rains are of vital importance to the agriculture of the district, as the spring cropped area is double that of the autumn and wheat is the main staple. Hence a failure of the winter rains would have more disastrous effect and cause more suffering than a failure of the monsoon. The best harvests occur after moderate, and above all timely, winter rains.

Soil distinctions.

The natural distinctions of soil known to the people were not employed for the purposes of assessment at the last two settlements, but are briefly as follows:—

Rohi.—Land lying in or near a depression, which, by reason of surface water collecting, has become hard and clayey.

Maira.—A firm level loam, often reddish in colour and easily worked.

Tibba.—Soil much mixed with sand, which will not form into clods, found in undulating ground and liable to be blown into ridges.

Doshahi.—A somewhat indefinite term, used to describe a soil which is none of the other three, usually mingled clay and sand.

Rohi.—Soil gives the heaviest yield but requires moisture steadily and constantly applied. In a very wet year it is liable to become water-logged, and the crops grown in it suffer accordingly. In a very dry year or when the supply of artificial irrigation fails, crops grown on it succeed no better. Regular and ample, but not excessive or deficient, moisture or irrigation is required. It is the soil most valued by the people, and is

CHAP. II. A. Agriculture. Soil distinctions.

the best for rice and other valuable irrigated crops. *Maira* is the next in value, being a clean soil, easily worked and weeded, and is that most commonly met with in Amritsar. Excess or failure of moisture works less harm to crops grown in it than to those raised on *rohi*, and it is especially suited to maize and wheat. *Tibba* is looked on as an inferior soil, and on this the yield is never heavy. It is not suited for irrigation as water travels slowly on it. But it succeeds with less rainfall than either *rohi* or *maira*, and the more sandy it is, the less it suffers from drought. Evaporation, so long as the sand is fine and not coarse, takes place slowly and it is therefore classed as a cool or *thandi* soil. But excessive rainfall is injurious, as it is apt to wash away the soil from about the roots, while high winds on exposed tracts may smother the plants in blown sand. *Moth* and gram suit it best and melons succeed well enough in it. *Dosháhi* is not easly to recognize. The people will describe their own *rohi* as *dosháhi* when they wish for any reason to depreciate it or will apply the term to their neighbour's sandy soil, when they have an object in making it out better than it really is. *Ghasra* is a term applied to a mixture of clay and sand in the Ajnála Bet, and *rakkar* to a poor shallow soil, with grey river sand at a short distance below the surface, also most frequently met with near the rivers. Such a soil needs a long rest, and ample and timely rain, and is apt to be infested with rats. *Khoba* is used to describe a thick layer of recent alluvial mud, loose in texture, left by the receding of river floods, which has not had time to settle and harden and *goira* means the artificially manured belt of land round the village site, and the soil found in it.

These distinctions are not, however, of the same importance in this district, as they are in others, owing to the prevalence of canal irrigation, and the *zamindars* only apply them to *barani* lands. The four branches of the canal, which traverse the district from North-east to South-west command practically the whole country between the high bank of the Beas and the Sakki *nala* in Ajnala. The only tracts that receive no irrigation from the canal are the part of Ajnala between the Sakki and the Ravi and that portion of the Amritsar tahsil, which lies north of the Grand Trunk road and between the Patti Rohi and Kasur Nala. In the latter tract there is much sandy undulating soil, not suitable to canal irrigation, but almost every village possesses a *chak* of rich well land. The Kasur branch of the canal crosses this part of the district but no distributaries are taken out of it till it reaches the Grand Trunk road.

Drainage lines.

The series of drainage lines, which cross the district mainly from the north-east to south-west, have already been referred to in Chapter I of this volume, but a more detailed description may suitably be given at this point. The most easterly line is that known as the Riarki Vang, which crosses the north-eastern corner of Amritsar tahsil, joining the Beas close to the railway bridge.

CHAP. II.A. Agriculture. Drainage lines.

West of this there is a stretch of some 6 to 8 miles broad of fertile and level country, across which flows the Sobraon branch of the Bari Doab canal. West of this again is the Patti Rohi traversing the Amritsar tahsil from Gurdaspur in two branches, which unite two or three miles within the Tarn Taran border. From the point of junction it runs a fairly straight course, passing out into Kasur close to Patti town, from which its name is derived, and a few miles lower joining the Sutlej river. It wrought considerable damage after the abnormal monsoons of 1908 and 1909 in some 5 or 6 villages and a large portion of their area has fallen out of cultivation in consequence of the floods then caused. Throughout most of its length, however, cultivation is general on the edges of its line and where the soil is not sandy and undulating very fair *rabi* crops are grown. No wells are sunk within the zone liable to flooding, but the slope of the country down to the drainage line facilitates both canal and well-water being led long distances to irrigate crops. This depression forms the boundary of the area commanded by the Sobraon branch.

After crossing the Kasur branch of the canal one comes to a strip of country, 2 to 5 miles in width, of excellent loamy land, bounded on the west by the drainage line known as the Kasur *Nála*. This *Nála* runs through both the Amritsar and Tarn Táran tahsils into Kasur and passes close to the town of Tarn Táran, where it is used to fill the sacred tank of the Darbár Sáhib. It is a deeper and better defined depression than the Patti Rohi, and the soil along its banks is usually a hard clay rather broken in character, though in places sandy undulations appear at a little distance back from the channel. A considerable amount of water is brought down this depression in the rainy season, and it is rare not to find its course marked at intervals by fairly deep pools. No canal water can be led across it.

On the right bank of the Kasur Nala lies the tract irrigated from the main branch of the Upper Bári Doáb canal. Much of the soil is a stiff clay, becoming continually harder and less absorbent with constant irrigation, and the spring level is only a few feet below the surface. The whole triangle of country, with its apex at Aliwál and its base resting on the Grand Trunk road, is low-lying, and the disposal of its surface drainage is a problem which has for years occupied the attention of successive District and Irrigation Officers. Full information on the subject may b[e] found in the report written by Mr. F. E. Gwyther at the end o[f] 1908. The whole tract is intersected by a network of canal distri[-]butaries and drainage lines, the latter being partly natural an[d] partly artificial. But the efficiency of the drainage lines is seriousl[y] hampered by their being crossed at innumerable points by road[s,] irrigation channels and railway lines. The two main drainage[s] are the Gumtála, which runs for many miles close to, and roughl[y] parallel with, the right bank of the main canal, turning to th[e]

CHAP. II, A. Agriculture. Drainage lines.

west a few miles north of Amritsar city, and the Hudiára, which serves the western part of the tract and runs close to the left bank of the Lahore branch. Both lines are joined at different points by various subsidiary channels. Eventually the two unite close to the tri-junction of the Amritsar, Ajnála and Tarn Táran tahsils, and are led under the railway and Grand Trunk road in the Tarn Táran village of Lahórimal. The safety of the whole tract thus depends on the efficiency of the Hudiára drain below the point of junction, and the channel has recently been artificially deepened and straightened. Various other improvements, including the remodelling of distributaries, have been carried out since the disastrous floods of 1908. The most important of these is the artificial channel connecting the swamp that surrounds the old fort at Majitha with the Hudiára drainage. These improvements have not been tested by any extraordinary rainfall since 1909, but they appear to be highly successful. After a month of monsoon rainfall aggregating 16½ inches in 1912 there were no signs of any serious flooding, and most of the drainages were working well.

In Ajnála the principal feature is the Sakki or Kiran stream, which has already been fully described in Chapter I. In the southern part of the tahsil there are several large *chambhs* or swamps, few of which ever completely dry up. From most of them artificial outlet channels leading down to the Sakki have been constructed. The whole tract of country between the Sakki and the Ravi is more or less alluvial in character, and is always exposed to the risk of floods from both rivers and their numerous back waters.

Water-logging.

As has been noted above the question of water-logging has been absorbing much attention of recent years owing to its causing efflorescense of *kallar*. The following is a quotation from the Assessment report of the Amritsar tahsil, written in 1912 :—

"A few general remarks on the subject of water-logging will not be out "of place at this point. In the first place, it should be explained that "though the whole of the triangular tract between the main and Lahore "branches is usually described as water-logged, the expression must not be "interpreted too literally. The tract comprises a large amount of excellent "land, as fertile as any in the tahsil, where a very high proportion of the more "valuable crops is grown. It is only where strips of low-lying clay occur that "deterioration is manifest. In such depressions there appears to be a stratum "of practically impervious clay or *kankar* a few feet below ground level, and "consequently it is impossible for the soil to absorb properly the water poured "over it from irrigation channels, or the surface drainage that naturally flows "into these depressions. The result is that in these hollows the water remains "in a stagnant condition for weeks after any appreciable rainfall, and when "it has eventually subsided efflorescence of *kallar* occurs and the soil tends to "become continually sourer and less fertile till finally it is impossible to grow "any crops at all on it.

CHAP. II, A.
Agriculture.
Water-logging.

"The causes contributing to this state of affairs are :—

(a) The difficulty of disposing promptly of storm water, owing to obstructions in the natural drainage lines. The embankment of the main canal, for example, intervenes between a large part of the tract and its natural outlet, the Kasur *Nala*. From another part the slope of the country is down into the basin in which the city lies, but sanitary considerations make it necessary to prevent too much water finding its way down this slope.

(b) Percolation from the main branches of the canal and its distributaries.

(c) In certain estates there has undoubtedly been excessive irrigation, but I hardly think that the amount of irrigation in the tract as a whole is excessive. Some of the villages which have suffered most severely from the spread of *kallar* receive only a very limited amount of canal water.

"I have already referred briefly to the efforts that have been and are "being made to facilitate the disposal of surface water. As regards percola-"tion, some three miles of the main canal have lately been lined as an experi-"mental measure, but the results have been inconclusive, as a large distribu-"tary running immediately alongside is still unlined. Further experiments "are being made on the Lahore and main branches. With the object of check-"ing excessive irrigation, one or two important distributaries have lately "been converted from perennial into *kharif* channels.

"Probably the solution of the problem will ultimately be found in the "substitution of tube wells for canal irrigation throughout a considerable part "of the tract. If a number of such wells were worked from one or more "electric power stations on the main canal, it is calculated that they would "earn reasonable profit on the capital cost with a scale of charges approxima-"ting Rs. 5 per acre irrigated. The zamindars would, I think, gladly pay "these charges, especially as they would be provided with an excellent "supply of drinking water."

Systems of cultivation.

The system of cultivation pursued in the district will be best described by considering it with reference to whether the crop is grown with or without the help of irrigation. As already stated, the district is classed as submontane, and the greater part of it is secure against very serious failure of either the summer or winter rains, but the certainty of each harvest is still further secured by ample irrigation, both from privately constructed wells and from state canals. This irrigation also admits of superior staples, such as sugarcane, cotton, maize and rice being grown, and enables a far larger area to be put under wheat than would be the case if the cultivator had to depend on rain alone.

Inferior or *barani* cultivation.

To take *bárání* cultivation first. The agricultural year begins with the kharíf harvest, or, say, from the 15th of June. Before this, while the rabi harvest is ripening, or in the month of March, the arrangements for the next year are usually made, and men who have not enough land of their own for their needs have entered into agreements for the lease of lands belonging to others for the coming year. But whether the cultivator be owner or tenant, he has to take advantage of what rain falls, during the months of May

CHAP. II.A.
Agriculture.
Inferior or *barani* cultivation.

and June, to plough what *báráni* land he intends to sow in the *kharíf*. When the first heavy fall of rain occurs in July the land is ploughed again, and when ready, is sown with great millet (*jowár*) mixed with pulses, such as *moth* or *múng*, or both. From this the cultivator expects to get some grain for himself and family, but chiefly fodder for his cattle. The crop is reaped in November and the fodder is stacked for use in the winter months. The amount of grain obtained from the *jowár* depends on the season, and on whether it is sown thick or thin. A good head of grain will only be obtained if it is sown sparsely. If the land is sandy and too light to support the heavy stalks of millet, pulses alone are sown. *Moth* leaves make excellent fodder, and are bought up in the district by the Gujar cow-keepers of the city, but cannot take the place of millets, a fact which puts the proprietors of sandridge villages at some disadvantage. After the *kharíf* or *sawani* crop has been reaped, the land lies fallow for two harvests, or a whole 12 months, but is ploughed whenever rain allows this to be done, especially in July and August. Then in October or November, it is sown with mixed wheat and gram, the proportion of wheat being five-eighths, or it may be two-thirds, of the whole. But the proportion depends on a good deal whether good rain has fallen just before sowing time. If it has, the proportion of wheat is increased. According to the character of the winter season, the wheat or the gram succeeds best. If the winter rains are short or untimely, the gram comes up better than the wheat, if plentiful, the wheat is far the better crop. In parts of the district rape (*saron*) is sown in drills, wide apart, among the wheat and gram. This crop is reaped in April, the rape being cut separately, unless it has before been pulled up green for fodder, and the wheat and gram are cut together. If intended for home consumption, they are threshed together; if the wheat is to be sold, it is winnowed out. Harvest operations last up till the beginning of June, if all goes well, after which the land is ploughed as above stated for the *kharíf* crop of *jowar*. This is the ordinary rotation on *báráni* lands, and is rarely departed from. No cultivator will put all his land down with either a *kharíf* or *rabi* crop, but the *báráni* land is cropped in alternate blocks, that on one side of the village being under wheat and gram (known as *berrera*) and the other being in its second season of fallow. Thus it never happens that the whole *barani* land of a village is under crop in one season. Nor will a tenant, if he can help it, arrange to take, in one season, only land whose turn it is to be cropped in *kharíf* or in *rabi*. He will take some fields in which according to the rotation he can sow *jowár* or pulses, and others in which he can, when the *rabi* comes round, sow wheat and gram. When in any season the rains fail, and the crop is either not sown at all, or is sown and withers, the rotation is of course thrown out, and a catch crop is put in out of turn, but it is not often that matters are so bad as that.

CHAP. II, A.
Agriculture.
Superior cultivation on wells.

On well lands the staple crops are maize, cotton, cane and wheat. The three first will generally be found occupying fields lying close to the well, so as to admit of their being watched, and for economy of water in the hot season. Not that wheat is confined to the more distant fields, for the three crops named by no means take up all the land within easy reach of water. Rotations are not very strictly observed, but it may be taken as a rule, that cane is put in, either in land which has been specially kept fallow for a year (*variál*) or in land which has borne maize or cotton in the previous *kharíf*, and has given a crop of trefoil fodder (*senji*) in the spring. After the cane comes wheat, usually of the kind known as *vadának*. *Toria*, a late autumn crop, may be put in on the wheat stubble. But much land on the wells will be kept for wheat alone, with a fallow between each crop, the succession being broken by a *kharíf* crop to prevent exhaustion. This is more common in parts of Tarn Taran, where cane is not much grown. In the interval between the reaping of the *rabi* (March or April) and the sowing of the maize in July, when nothing else but the young cotton and cane will be growing on the well lands, some of the fields will always be taken up with melons, or with *chari*, the name given to green *jowár*, grown for fodder. This last is not allowed to ripen but is fed to cattle mixed with chopped wheat straw (*bhusa*). In parts of the district where *rohi* land is common rice is grown on the wells, sometimes alternating with wheat. This is found in Ajnála chiefly, north of the Sak-*nala*. But the yield is never so heavy as that of rice on canal lands. The cultivation of well lands is neat and careful, the limits of the fields are seldom changed except they are subdivided, and the land is economised to the utmost. Usually the cane crop is the only one which is fenced with thorn branches stuck in the ground all round it, but the paths by which the cattle pass to and from the well are nearly always edged or protected by banks of earth, topped with thorn or cactus.

Cultivation of Canal irrigated land.

Canal cultivation is less tidy. Rice, maize, cane, and wheat are the chief crops grown, and to a less extent cotton, but on the rice stubbles there is a good deal of barley, of the pulse known as *massar*, as well as *senji*, a crop which needs constant and ample waterings. There is less adherence to rotation on *nahri* than on *chahi* lands, more double cropping, less manuring, and on the whole less careful and more varied cultivation. Much canal land is kept for rice alone, unless, during the *rabi*, gram or one of the three stubble crops above mentioned is put in. But these are quite subordinate to the rice crop : the charges on account of canal water are too heavy to admit of the land being wholly given up to the growing of inferior crops. Canal irrigation brings in large returns with a smaller expenditure of labour than well irrigation, but the cost is considerable, the average payment for canal water supplied being about Rs. 3-13-0 for every acre of crop raised in the *kharíf*, and Rs. 3-9-0 in the *rabi* season. The people like it on account of the

CHAP. II, A
Agriculture.
Cultivation of Canal irrigated land.

saving of labour, and the certainty of the crop, though there is the disadvantage of not always getting water when most required, and of having to submit to more official interference. Once committed to taking canal water on a certain area of land, it is hard to go back and return to any other system, when the wells have been thrown out of gear, and the land has hardened so that *báráni* cultivation would yield but a small return. On the whole, the people will generally say that a well, in good working order, well equipped with strong cattle, watering an average area of, say, 16 to 20 acres, and with soil of average fertility, not too far from the sources of manure will yield as good, if not a better, return than an equal area of average canal land.

Sailab lands.

Sailab crops are not of very great importance. Much depends on how the village has been treated by the river and on the nature of the silt deposited. Sugarcane is grown to the extent of 600 acres on this land, but is not of a very good quality and its area of cultivation is decreasing yearly. Cotton and rice are not much grown, but maize, despite its liability to suffer from excessive moisture occupies about 1,200 acres. Maize, mash and sugarcane are the principal autumn crops, and wheat, barley, massar and melons the principal *rabi* staples, wheat being far the most important. About 16,000 acres of sailab wheat are raised yearly. Manure is rarely applied, for the silt itself is fertilizing, and it is not often that more than one crop is taken off the same land in a year, or, if it is taken, it is not such as to exhaust the land.

Manure.

A considerable part of the cattle dung is used for fuel, being preferred for cooking purposes to wood, which also is too valuable to be used for burning. Wood is burnt on the funeral pyre and sometimes in brick kilns, but the rest of it, excluding shade trees, is only sufficient for the making and repair of agricultural implements, roofing, well tackle, hedging and the like. The manure used consists of the remainder of the cattle dung, mixed with ordinary farm yard and house sweepings, and refuse fodder and litter. The *goira* or land near the village site naturally receives a fertilizing supply of night soil, the habits of the people in this respect being primitive, but it is not always that this is deposited on the cultivated land. The lanes and waste land within easy reach of the village are usually foul with night soil, which it is no one's business to remove. From the manure heaps round the village the stuff is carted on to the fields and the well land receives the most of it. Maize, cane, and cotton are always manured, and sometimes wheat, but this crop more often follows other manured crops and so is benefitted indirectly. Wheat and rice on the best fields, however, are top dressed, while green, with sifted powdery sweepings known as *kalar* from waste land near the village, and old village sites, and this work is always done by Chuhras who bring it in baskets. Tobacco is most carefully manured with these siftings in Mohammadan villages and Arains may be seen heaping it up round each stalk of the plant.

CHAP. II, A. Agriculture. Double cropping.

On the total cultivated area of the district, 750, 323 acres, 933,388 acres of crops are sown annually. Of these 9·8 per cent. fail and the balance come to maturity. In other words on each 100 acres of cultivation about 112 acres of crops are raised. The percentages for the three tahsils and the district are as follows :—

Tahsil.	*Percentage of total cultivated area harvested in*			Percentage of cultivated area bearing two crops.	*Percentage of sown area failed in*		
	Kharif.	Rabi.	Total.		Kharif.	Rabi.	Total.
Amritsar	39	74	113	13	10·9	7	8·4
Tarn Taran	28	34	112	12	15·4	6 9	9·2
Ajnala	29	75	104	4	17·9	10·1	12·4
District	32	80	112	12	14	7·9	9·8

Agricultural implements. The plough.

The plough used by the people is a very simple instrument made entirely of wood, with the exception of the coulter which is supplied by the village blacksmith as part of the work for which he receives a harvest wage in kind. Both the *hal* and *hallar* are used, the latter always in the Manjha and throughout the district in new and heavy land, the former in the most of Amritsar and Ajnala. The *hallar* is of the same nature as the *munna*, which is used in the Doaba, but is not quite so heavy. The whole is so light that it could be easily carried on a man's shoulder. Practically, the whole apparatus consists of only four parts, (1) the wooden yoke (*panjali*) which lies across the neck of the bullocks behind the shoulder hump, and which is kept in its place by four vertical bars (the outer ones or *arlis* movable and the inner ones or *mattias* immovable), fitting on to the lower cross bar under the neck ; (2) the beam or pole fastened to the yoke with a piece of leather termed *nara* and fitting into (3) the iron shod sole which does the work, and (4) an upright handle with which the ploughman does the guiding. When returning from work the beam is loosed from the yoke, reversed and hitched over it (*harnali karna*) by the coulter. Land is often ploughed ten or twelve times for valuable crops, and the cultivation must be very rough when the ploughing is done only once. The field may be ploughed in sections up and down or in narrowing circles, beginning round the edge of the field, but the turn is invariably to the left (the course followed in the track round the well wheel) and the bullocks are so used to this that they could hardly be made to turn to the right, even if wished. Three or four ploughs may often be seen at work in one field, each following

CHAP. IIA, Agriculture. Agricultural implements. The plough.

the other (but in a different furrow) when it is wished to take immediate advantage of the state of the ground and get the seed in at the right time. The people often do a day's work in this way for a neighbour, the obligation being returned some other time. As the object is to disintegrate the soil, without turning it up and exposing it to the air more than is necessary, the ploughing is never deep, a few inches sufficing, especially in sandy land. Still it is hard work in stiff land, with the small confined fields into which the ground is divided, for the bullocks are often imperfectly trained, and are guided only by the frequent application of the *parani* or oxgoad, sometimes furnished with a lash of strips of leather.

A few of the bigger land-holders have purchased European ploughs, such as are exhibited at the Lyallpur College, but these have made no real headway in the district as a whole.

The Sohaga.

Ploughing is succeeded on most soils by working over the ground with the flat levelling beam or *sohaga*, which crushes the clods and flattens the surface to keep the moisture in, thus leaving as small a surface exposed to the sun as possible. If the seed has been sown the *sohaga* covers it in the furrow. Two yoke of oxen are harnessed to the *sohaga* all four abreast, and a man is required to each yoke. They ride standing on the *sohaga* to weight it down, steadying themselves, and encouraging the cattle, by holding on to the tail. Fields, which are intended for rice cultivation, are often worked over with what is called a '*kaddo*' instead of the *sohaga*. This is a flat beam with six or seven nails protruding from it. The nails tear up the land while the heavy beam crushes the clods and flattens the surface in the same way as the *sohaga* does. Only sandy soil can be broken up when it is dry. Other soils require to be moistened with rain, or artificial flooding, before they can be properly ploughed. The state of the ground when it is neither too wet nor too dry to be worked is known as *watar*. Stiff rice land is even ploughed when there are two or three inches of water standing on it, and this is real hard work for the cattle. But on *maira* soil, after sufficient ploughing has been done, the seed is sown either broadcast or with a drill (*por*), a bell-mouthed bamboo tube tied to the handle of the plough. If the sowing be broadcast the *sohága* is used to cover the seed; if through a drill, the heel of the sole of the plough, which lies behind the mouth of the *por* effects this. But the *sohága* is always used on well lands for seed covering. After this, on well lands, the ground has to be divided into compartments or *kiáris* for convenience of watering. This is done with a rake (*jhandra*) fitted with broad wooden teeth, on the same plane as the handle, and worked by two men, one of whom guides the handle, and the other, facing him, pulls by a rope, fastened to near the junction of handle and blade. This is used to make temporary water channels (*ár* or *ád*)

The Sohaga.

but the main channels for well water are kept for years untouched, so as to leave them firm, and save waste of water. They are even weeded, to keep them clear of grass and secure a flow. These compartments are raked off as a finishing touch after the seed is sown.

Other agricultural implements.

Other implements in general use are the *kohari* or common axe for cutting wood and the *toka*, an axe or chopper with a long handle fitted with an iron blade about 6 inches in length; it is used for cutting up *jowar* stalks for fodder. When fitted with a lighter blade and a longer handle, it is known as a *gandasa* or *chhawi* and was used for cutting branches for hedging. Its possession has now been made illegal under the Arms Act and the *kohari* is very generally used instead for hedging purposes. Reaping is done with a small toothed sickle called a *datri*, which requires frequent sharpening of the teeth, as they get worn down very quickly, and for weeding a short handled spud or *ramba* is used, the cultivator going through the field in a sitting position and digging out the weeds between each plant. The *gandala* is a stick shod with iron, which is used for digging narrow deep holes, into which hedging-stakes are placed, and is a handy tool on house-breaking expeditions. The *kahi* or mattock is an indispensable implement, and at some times of the year is the one most often in the cultivator's hands. It is used for all kinds of digging or shovelling earth and even for stubbing up roots. The *parlu*, a heavy wooden roller, is only met with in parts of Tarn Taran, where there are wide stretches of hard *barani* land and is used to crush clods in hard *maira* land instead of the *sohaga*. A heavy wooden mallet is used for beating out *munj* to produce rope. The *salpang* is a wooden fork with two prongs, something after the fashion of a pitch fork, with which the Jat gathers heaps of the prickly *malha* or thorny dwarf *ber* for hedging and for cattle enclosures round the wells. When fitted with more than two prongs it is used to gather the loose straw and grain on the threshing floor (*pir*) and to toss it when wetted by the rain. The sheaves of wheat are lifted by hand and not with the fork. *Chhar*, a long stick with a hooked blade at the edge of it, is used by goat herds or shepherds for cutting branches from high trees. The leather blinkers, which are placed over the bullocks' eyes when working a Persian wheel, are called *khopa*. Threshing is done on the hard beaten ground, on which the crop is spread out; the thresher (*phalla*) is then dragged round by two bullocks, till the grain is extracted from the husk. Winnowing baskets, which are called *chajj*, are made of the thick stalks of the *sirkana* grass by Chuhras and Mahtams; they are filled with the broken straw, husks and grain and emptied in the air, the action of the wind separating the heavy grain from the *bhusa* or chaff.

CHAP. II.A. Agriculture.

Population engaged in agriculture.

Out of the total population of the district, 343,373 persons are dependent upon agriculture, and of these 38 per cent. are actual workers, the remainder being dependents. Owners number 123,844, of whom 88,882 are Jats.

Hired labourers.

Seven thousand eight hundred seventy-seven persons are returned as farm servants or field-labourers, with 7,576 dependents attached to them, making a total of 15,453. So many land-owners of the district, especially of the Tarn Táran tahsil are away on military service that hired labour is required on a comparatively large scale for the reaping of the spring harvest and also part of the rice crop. The precise extent to which the hired labour is employed is very difficult to estimate, varying as it does largely from year to year. A severe outbreak of plague coinciding with the ripening of the wheat harvest means that labour must be imported from elsewhere and liberally paid. These *lawis*, as they are called, received a *bhari* per day as wages in Tarn Táran and Amritsar, but only two *bharis* in three days in Ajnála, where *Changars* are also nearly always employed to cut and thresh the rice, receiving three seers per maund of the outturn. It was calculated that in Tarn Táran roughly about one-fourth to one-third of the area under *rabi* cereals has to be cut by hired labour; in Amritsar tahsil the proportion is much lower, varying between 6 and 8 per cent. The employment of village menials as agricultural labourers and the system of payment in kind to them is discussed later on in this chapter under the head of wages.

Crops.

The comparative importance of the various staples is best exhibited in the form of percentages on the total matured area of both harvests. The figures in the following table are calculated on the average results of the ten harvests selected as the basis of the produce estimate during the recent reassessment of the district:—

Harvest.	Crops.	TAHSILS. Ajnála.	Amritsar.	Tarn Taran.	Total.
KHARIF ...	Rice	7·6	3·8	2·8	4·1
	Maize	5·8	4·9	5·0	5·1
	Pulses	·7	3·4	·7	1·7
	Sugarcane	2·5	2·7	·8	1·9
	Cotton	3·9	3·2	5·7	4·4
	Fodder	6·3	14·2	9·8	10·7
	Others	1·1	2·1	·6	1·3
	Total Kharif	27·9	34·3	25·4	29·2
RABI	Wheat	40·6	22·9	23·3	26·7
	Wheat and gram ..	8·3	22·8	28·1	22·0
	Barley	3·9	2·0	1·1	2·0
	Gram	4·5	5·1	8·3	6·3
	Oil-seeds	1·7	2·0	2·8	2·3
	Fodder	9·2	8·5	9·7	9·2
	Others	3·9	2·4	1·3	2·3
	Total Rabi	72·1	65·7	74·6	70·8
	Total both harvests ...	100	100	100	100

CHAP. II.A.
Agriculture.
Wheat.

The chief among the *rabi* crops is wheat. It is the principal staple of the district, and covers annually from three and a quarter to three and three-quarter lakhs of acres, which means 40 per cent. of the whole cropped area. At the prices ruling for the last ten years, and likely to rule for the next ten, the year must be a bad one when the total value of the wheat raised in Amritsar falls short of seventy lakhs of rupees. On irrigated land it is grown unmixed, but on *bárdni* lands it is usually grown mixed with gram, the proportion being about 5 of wheat to 3 of gram. The mixture is known as *berrera* and in stating the total area of wheat above, the wheat in the *berrera* has been counted in, calculated according to this proportion. Both wheat and *berrera* are sown in October or November, the *berrera* generally rather before the most of the wheat on irrigated lands. The *bárdni* crops do well enough without rain up to Christmas, if there has been the proper amount of moisture on the soil at sowing time. But, by Christmas, rain is expected, if only to keep down the ravages of the white ants, which do the crop much harm. After good rain in January and February, not much more is required in March, and the crop is ready for harvesting by the beginning of April. The wheat on well and canal lands is later, but with them the harvest is seldom delayed after the 15th of April. Threshing and winnowing operations take a long time, and it is often the beginning of June before the whole crop has been cut, carried, threshed and taken home.

Several kinds of wheat are grown. The best is *vaddnak*, distinguished by its height, the bluish green tinge of the plant before it turns colour, flat regular ear, and length of beard. This is only grown on irrigated land, generally on a field from which cane has been taken the preceding February, and gives a heavier yield than any other wheat. It is grown all over the district, on well land for choice, perhaps more in the Nahri circle of Ajnála than elsewhere. The soft white wheat (*chitti*) is fast coming into favour, being preferred by exporters. The grain is not so full as *vaddnak* and when the plant turns colour it may be recognized (in spite of its name, which only has reference to the grain) by its being more reddish in tinge than other wheats. The hard red wheat (*lál kanak*) is the one most usually grown on *bárdni* lands, alone and with gram. A beardless wheat called *ghoni* is also finding favour. The other three are all bearded wheats, and are rather longer in the straw than *ghoni*, a good deal of which is exported.

The land is always carefully prepared for wheat, ploughed whenever an opportunity occurs during the half-year preceding the sowing, and flattened out and pulverized with the *sohága*. Little, if any, weeding is required on irrigated land, except when the *bughát* weed appears. Other weeds make no head at that season of the year, but if it is a wet spring the natural clover (*maina*), which is found in highly irrigated tracts, is apt to choke and obstruct the plant at a time when no weeding is possible.

CHAP. II A.

Agriculture.

Wheat.

The grain is separated from the straw and chaff in the well-known primitive way which has been followed by the people for centuries. The sheaves are heaped up, near a well for choice, and close to the smooth bit of hard ground selected for a threshing floor. A sheaf is about as much as a man can carry as a head load, and will yield from 12 to 16 sérs of grain, standard weight. A number of sheaves are loosed and spread out round a stake driven into the ground. To this stake the muzzled oxen, three or four abreast, are fastened and round it they tramp, beating out the grain with their feet, or to hasten the process, dragging after them a rough arrangement of wood and brushwood, shaped like a raft, and weighted with clods or lumps of fused brick from the kiln. Gradually the grain is separated, and is then winnowed from the chaff by being allowed to fall from the *chajj* or basket held aloft by the winnower. In May there is generally a hot wind blowing at some part of the day, which helps the process, and the hotter and fiercer the wind the sooner is the harvesting ended. Damage may occasionally be done, especially if the harvest be late, by untimely thunder showers. If repeated the showers swell the grain, make it sprout in the sheaf, and blacken the *bhusa*. But fortunately they are exceptional, for April and May are dry months. The broken straw or *bhusa* is carefully stored in a sheltered place near the well, in conical stacks, neatly thatched with a part of the straw which has been left long, and set apart on purpose. This is the main dry fodder for the working cattle during the next winter. The *bhusa* is raked out through a small hole at the foot of the stack until the latter falls in. The grain is taken away by potters on their donkeys to the village where it is stored in *kothís* or granaries for sale, or in *bharolas* for household use.

Gram.

The area of gram (*chole*) is about a lakh and a quarter of acres, but may rise to nearly a lakh and a half. More than half of the whole is raised in the Tarn Táran tahsil, and the quantity grown in Ajnála is quite insignificant, being roughly but a tenth of the whole. It forms part of the crop already described under the name of *berrera*, is also grown alone on sandy lands without irrigation, and appears as a second crop on rice stubbles, or on fields which have borne a summer crop of *chari* or green *jowár*. It does not require careful cultivation, but like most spring crops needs to be first sown in fairly moist ground to germinate well. It is harvested, if grown alone, about the same time as barley, but before the bulk of the wheat. It is a hardy plant in most respects, and is only liable to damage in poor soils when rain holds off for long in early spring, when high winds with dust occur at blossoming time in March, or when there is along spell of damp, cloudy, thundery weather. It may also be thrown back, when the shoots are just coming through the ground, if light showers, followed by hot sun, cake the surface of the *maira* soil. In such a case there is nothing for it, but to break up the crust with the *sohága*, or

CHAP. II.A. Agriculture. Gram.

even re-sow the field. The growth of *maina* is also specially injurious to gram sown on rice stubble. The young plants make excellent food for horses when cut green in March or early April, and the grain is well known as a food for both horses and cart bullocks.

Rice.

Rice is grown about equally in all three tahsíls, slightly less in Tarn Táran than in the others, the lighter soil of that tahsíl not favouring it so much. The soil suited to rice is limited in extent, for putting aside the small area grown on the wells in the Ajnála Hithár, the soil must be *rohi*, or very nearly so, and it must have canal water. Given these two conditions the Amritsar Jat will grow rice wherever he possibly can, and will grow it year after year. The plant is known all through the district as *jhona*, whatever the variety grown. But the varieties differ little from each other, the *basmatti* being the best. In May and June the land devoted to rice is flooded and ploughed. Nothing short of saturation will make the iron-bound clay rice land fit for the plough. The best rice is transplanted from nurseries (*paniri*), but a great deal is sown broadcast. *Lawen* and *bhijen* are the terms employed for the two processes. The former certainly gives a larger yield. Changars and Purbias are employed in Ajnála, and near Majítha, to do this work, and are paid by a 5 per cent. share of the crop, which share is known as *labh*. Rice requires constant and ample watering and does best, while growing, when it is kept standing in two or three inches of water, but not after it is in ear. A failure of rain or canal water in August is especially injurious. It is reaped in October, and ripens very quickly. The grain is very loose in the ear when ripe, and in estimating the yield the amount that is dropped during harvesting or shaken out by high winds has always to be allowed for. An average field will yield about 18 to 25 maunds to the acre and the grain sells at harvest time for about 23 sérs the rupee. But allowance has always to be made for shrinkage in weight as the grain dries. The grain is either trodden out in the usual way by oxen, or flogged out by hand, the labourer bringing the sheaf down on the edge of a small clay trough. Though the yield of an average field is as above stated, it may be as much as 30, 35 or 40 maunds to the acre, if heavily manured, carefully watered, and grown on land which is fairly free from pronounced *kalar*. Still it is the one crop to which a small admixture of *kalar* in the soil does no great harm, rather the reverse, it is said. The straw is of little use, cattle only eating it if they can get nothing else, which is seldom the case at the time of rice harvest. Consequently in rice villages much of the straw or *paráli* is left out in the fields till far into the winter and is spoilt. The coarser kinds are known as *dhain* and *kharsu*. The former is grown in the beds of drainage lines, and the latter in the moist alluvial lands on the rivers. They are of little value or importance.

Rice.

Though *jhona* only accounts for 3 per cent. of the cropped area in the two southern tahsíls and 7 per cent. in Ajnála it is held of great value, and the fortunate villages which grow a large area are the objects of much envy to their neighbours.

Maize.

Maize used to be more grown on the wells than on canal lands, but the average of the selected years taken at the recent settlement shows that nearly 55 per cent. of the area covered by this crop is canal irrigated, while barely 30 per cent. is well-land. The change has probably been brought about owing to the greater certainty in the supply of canal water, as maize needs, besides careful cultivation, hoeing and weeding, constant but moderate supplies of water. It forms the principal autumn staple of the trans-Sakki villages, where it is still chiefly a *chahi* crop. It is known as *makki* or *makei*, and at least three kinds are grown, the one with the red grain being the commonest, next the white grained, and lastly the Lahori which has a very short stalk. The ground is carefully prepared and the seed is sown at the end of the second week in July. The area sown ranges from forty to fifty thousand acres. It is liable to damage by birds and jackals, and raised platforms are made when the crop is ripening, on which the watchers sit to scare off the birds. It is reaped in October and November, and the yield varies from 12 to 15 maunds to the acre on an average. What has been said about the grain of rice drying and losing weight applies also to maize. The grain has to be beaten out of the cobs or *challis* with a heavy stick. The core of the cob is used as fuel. The straw is chopped and fed to cattle, but is not good fodder, and where there is much of it, it is often left out and spoilt by damp and heavy dews. It used to be a common practice to take a canal watering for the maize just before it was reaped, pull up the stalks out of the saturated ground, and put in a crop of *senji* at once. This got a good start in the richly manured land and the cultivator escaped paying water-rates for the *senji* crop. But under the present scale of water-rates *wadh* or stubble waterings are separately charged for.

Cotton.

Cotton is grown both on well and canal lands, but succeeds better on the former. It has increased enormously in popularity since the settlement of 1893, as the following figures show :—

Year.	*Area under cotton.*
1892-93	22,106
Average 1895-96 to 1899-1900	25,059
" 1900-01 to 1904-05	31,145
" 1905-06 to 1909-10	42,127
1911-12	57,437

It is now the most important of the *kharif* crops. Its popularity is due to the continuous advance in price and to the fact that it involves comparatively little labour, as two ploughings and four waterings will produce a very fair yield. As a rule, it is only weeded twice and does not receive much, if any, manure.

CHAP. II.A. Agriculture. Cotton.

Cucumbers, melons, chillies, and even thinly sown stalks of millet fodder are grown in the same field by the Ajnála cultivators which makes it very difficult to fairly estimate the outturn of cotton There are few varieties; of the fancy kinds sometimes grown the *narma* with a broad reddish leaf and large rose-colored seed pod is the best known. Picking will begin in November and last till January. This is done by the women and children of the family, unless where seclusion of women is the custom. When the leaves drop, and the last picking, which is by custom allowed to the Chuhras, has taken place, the sticks are cut down close to the root and used for roofing purposes, or are wattled to form the enclosing sides of dung carts and shelters for chopping fodder. *Senji* is almost always sown in among the cotton, about the time of bursting of the pods. The yield of good irrigated cotton may be taken to be about 240 sérs to the acre, but this is a cautious estimate, on account of the difficulty in arriving at the yield, and is for uncleaned cotton (*i. e.*, with the seed adhering to the fibre). Ginned cotton would lose in weight nearly two-thirds of this. The largest area of cotton is grown in Tarn Táran, mainly on canal lands. About half the area of unirrigated cotton is also grown in that tahsíl. Here the yield is more uncertain still, and inequalities in the soil cannot be corrected by the application of manure. The area under *barani* cotton fluctuates much and depends largely on whether there has been good rain in February. That under irrigated cotton is very stable from year to year.

Sugarcane.

The cultivation of sugarcane has decreased greatly since the settlement of 1893, when 24,000 acres were under this crop, as compared with less than 16,000 acres now. The decrease has been very marked in the Tarn Táran tahsíl, where sugarcane has been supplanted by cotton. This decrease is due to the vast amount of labour it requires and the long period for which it occupies the ground. Also the consumption of sugar at weddings and other festivals is stated to have declined very much of late years. More than half the area cultivated is in the Amritsar tahsíl and the least is found in Tarn Táran, in the southern portion of which the cultivators have neither the soil nor the irrigation which is required to grow it successfully. After repeated ploughings the soil is ready for the reception of the seed in March or April, when the seed canes, for which about a twentieth of last year's crop is required, are unearthed from the pit, in which they have lain buried for three or four months, cut into lengths of about nine inches, and placed in the highly pulverised soil. The young crop needs constant watching, watering, and weeding during the months of extreme heat which follow until the rains break, and during any temporary cessation of the rains, until the crop is ready for cutting, watering has to be given steadily. The canes are, as a rule, carefully fenced, and

CHAP. II, A. — Agriculture. Sugarcane.

except in the Ajnála Bet the land receives a quantity of manure, both before planting and afterwards as a top dressing. Cutting begins in December in the Ajnála Bet, and is carried on in January and February in the rest of the district. In a wet season the canes may stand uncut in March or even April, but if as late as this they are worth little and are largely fed to cattle. The canes are stripped of leaves, and when cut, are from three to five feet long, when they are passed through the *velna* which is a cumbrous arrangement of cogged wooden wheels and rollers, or the iron Behea sugar-mill which is fast superseding the *velna*. The juice is boiled in shallow iron pans in the *gurial* or boiling house and is generally sold by the cultivator in the form of *gur* in lumps or *roris* weighing about a pound and a half each. Further refinement is not often attempted, nor is there much manufacture of *rab* or *shakar*, except in the upper part of the Nahri circle of Amritsar, and there only in the best villages. Five kinds of cane are grown. *Paunda* (of two varieties, known as Jullunduri and Saharanpuri) is a thick heavy cane, grown principally near the city, where it is heavily manured from the city sweeping. It is also found in a few Upper Manjha villages of the Tarn Táran tahsil and in the best villages of the Nahri and Uthar circles of Ajnála. It is not pressed for juice but sold for chewing by *halwa is* or sweetmeat-sellers. The canes grown on anacre will fetch Rs. 300, or even Rs. 350, but the cost of cultivation (ploughing, trenching, watering, weeding, manure and watching) is enormous. While the *paunda* is young, vegetables (generally leeks or eggplant, known as *bhaingan*) are grown on ridges in the same land, the cane growing among them, but the vegetables are off the ground before the cane attains any height. *Kátha*, a thin red hardy cane is far the commonest kind grown throughout the district. At present prices *kátha* produces *gur* to the value of from Rs. 60 to Rs. 80 an acre. This may be exceeded on the Batála border in the Amritsar tahsíl, and may reach Rs. 100, in the best cultivated fields. But the crop is liable to damage from many causes, such as blight or *tela*, rats, frost nd white ants, and the gross value varies much from field to fied. Still in villages like Nág, Bhoma, Chandanki, and Mahta, wh re cane is a speciality, the yield of *gur* is rarely worth less than Rs. 100 an acre. *Kao* is a thicker cane, of a whitish colour, with a broader leaf, requiring less weeding, it is said, but much water. This variety is rapidly finding favor on the best canal lands in Amritsar and Ajnála, having only been recently introduced from Batála, and the people go a long way in search of good seed canes. It requires more water than can be given from an ordinary well. The other two are *teru* and *dhaulu*, of a value about midway between *kao* and *kátha*. The former of the two is not often met with, being more grown in Siálkot, but *dhaulu* is a good cane and is often grown mixed with *kátha*. Sometimes after the canes have been cut down, the land is weeded, manured and watered, and the plants are allowed to sprout again for what is called a *mudhi* crop,

CHAP. II, A. Agriculture. Sugarcane.

but the yield of this is small, probably not more than half that of a planted crop. Cane growing is not a special feature of the district as it is in Hoshiárpur, Jullundur and part of Gurdáspur. The gross value of the outturn is large, but the plant occupies the ground for at least a twelve-month, or even a year and a half, if the time spent in preparing the ground is taken into account, and the labour and cost of cultivating it and extracting the juice are great. It is purely a revenue crop: very little of the produce finds its way to the cultivator's family, or escapes being turned into cash.

Barley.

The amount of barley grown varies very much from year to year ranging between twelve and twenty seven thousand acres; it is more grown in Ajnála and Amritsar than in Tarn Táran. It is raised with and without irrigation, by itself or mixed with gram, but rarely with wheat, and sometimes on the stubble of rice. It does not seem to exhaust the land so much as wheat, and, ripening quickly, it is off the ground early in April, making room sometimes for a melon crop. When rain has held off in late autumn, and the *rabi* crop is shorter than usual, advantage is taken of the first Christmas rains to put in a crop of barley. Wheat would never thrive if put in so late, but barley is a convenient catch crop. On small plots on wells it is sometimes cut green for fodder and if allowed to ripen, it is not unusual to pluck the ears while the crop is standing and thresh out the grain by itself. The standing straw is then cut down and used for thatching stacks of *bhusa*. On well lands it is usual to allow the Chuhra who works on the well to sow a row of barley at the edge of the wheat fields and especially close to the water-course.

Jowar.

Jowar is universally grown and covers a large area; in the crop-returns it is now all entered as fodder and forms the bulk of the area under the heading "other non-food crops." This makes comparison with earlier years impossible. The cultivator rarely hopes to obtain any grain from the *jowar* and the almost universal custom is to cut it all as fodder, only the small quantity sown to fence in the maize fields being allowed to ripen to provide seed. Thus he does not depend on the *jowar* grain for food throughout the winter like the cultivator in some districts south of the Sutlej, but he can hardly do without the broad-leaved stalks as fodder for his cattle. It is not manured and where allowed to ripen is not irrigated, except in villages which have a large well area, and little *baráni* land. The green *jowár*, which is not allowed to ripen and which is grown for fodder only, at a time of the year (May and June) when no other green fodder fit for stalled cattle is available, is irrigated both from wells and canals. The *jowár* crop is sown at the beginning of July after the first heavy fall of monsoon rain. This is one of the busiest times of the year, and no effort is spared to get the seed into the ground at

CHAP. II, A
Agriculture.

the most favourable opportunity. A good deal of the seed is imported from the Jullundur Doáb and Ferozepore. It is sown mixed, as a rule, with *moth* and *mung*.

Jowar.

It is grown on the well-known *dosála* rotation already described, the *jowár* being preceded by mixed wheat and gram, or gram alone, and followed by a whole year's fallow after the harvest in October and November. The *moth* and *mung* are reaped with the *jowár*, and the grain of the pulse is then separated. The heads of *jowár* containing the seed are cut off, and beaten or trodden to separate the grain. The stalks are stacked in the field for a time to dry and then piled on the roofs of houses, and other dry places, to be used as fodder throughout the early winter. Villages which lie near the main road, and grow a large area of *jowár* often sell it to men from the city, and this is a not unimportant item in their income. But as winter draws on, there is none to spare, and each man's store of it is carefully husbanded. The crop is known either as *jowár* or *chari*, sometimes by the double name *chari-jowár*, but *chari* is the name by which the fodder part of the plant is known. The cattle of the district are so dependent on *jowár* for food, at the time of the year when the bullocks are hardest worked, that a failure of the crop is quite a calamity. Fortunately it does not often occur. Rain in the first week of July, and steady rain at intervals throughout the month, and the next six weeks, is quite enough to assure the success of the *jowár* crop.

Kharif pulses.

Moth, *mung*, and *másh* are the three principal pulses grown in the *kharif* harvest. They have greatly declined in popularity in the last twenty years. *Massar* is grown in the *rabi*. The two first named are either grown separately or with *jowár*. *Moth* is chiefly raised on the light lands of the sand ridge, and does not require so much rain as other *kharif* crops. It will do fairly well in a season when the *jowár* is withered and stunted. The grain enters largely into the food of the people, and the dark green *bhusa*, formed of the leaves after the grain is beaten out, is a valuable fodder for milch and working cattle. A good deal of it finds its way to the city, as it is difficult for the cultivators to store it. Almost all the *moth-bhusa* raised in the sand ridge villages near Jandiála is thus disposed of. Excessive rain washes the soil from the roots and high winds smother the plant in sand. All it requires is moderate rain in the two monsoon months and heavy dews in September. *Mung* can be, and is grown, on firmer land, particularly in that part of the Amritsar tahsíl which lies between the Sobráon Branch of the canal and the Beás. Here it is an important crop. The times of sowing and reaping are the same as for *jowár*, only it ripens a little earlier, and the broad leaves do not make valuable fodder. *Másh* is perhaps the most valuable pulse and gives a larger yield than the other two. A fairly stiff soil with a good deal of moisture is required, and it is often sown near the rivers, but in a rude fashion, without much preparation of the ground. The following winter it is often hard to tell

CHAP. II, A. — Agriculture. Kharif pulses.

whether a crop of *másh* has been taken off the ground or not, so little trace of it is left. It is seldom grown along with *jowár*, but is sometimes grown at the foot of the maize stalks on irrigated lands.

Til.

Sesamum or *til* occupies usually about 4,000 acres, of which one-fourth may be irrigated. A little is grown in Ajnála but the non-canal irrigated parts of Amritsar supply about two-thirds of the crop.

The crops known to the people as *kangni, chína, swánk*, and *bájra* are little grown being looked upon as inferior grains only to be resorted to as food when all else fails. Nor is *mandwa* (here known as *maddal*) a favorite crop. Aráíns and Muhammadan Játs grow it in the Ajnála Hithár, but the meal makes a coarse black bread, which is regarded as a poor kind of food requiring a strong digestion. The only other *kharif* crop that may be mentioned is *mirch* or chillies. It is grown near the city, and also by Aráíns in Ajnála, in the Sakki villages. The neighbourhood of Sourián is known to grow good *mirch*, not because the soil or conditions of the tract are especially favourable, but because Aráíns hold a number of villages there, and the raising of crops requiring much manure and careful tillage and giving a large money return have an attraction for them. The seed pods are picked by the women (the process causing much irritation to the hands) and are then dried in the sun.

Rape.

Rape is a risky plant to grow as so much depends on nothing untoward happening while it is in blossom. It is seldom sown alone except in the south of Tarn Táran, and is rarely grown in any form in Ajnála. The commonest method is to sow it in rows, eight or ten feet apart, up and down the fields of *berrera*, a method which gives its spreading plants a better chance. Much of it is plucked up unripe for fodder and for use as *ság* or greens when the wheat is about a foot high. From its spreading habit, and from the show which it makes with its yellow blossoms, it is apt to give a false idea of the strength of the crop, if seen a little way off, and a field will be found to be of a much poorer growth when ridden through, than when seen from a distance. Rape is usually sown with a drill in deeper furrows specially made for it after the field is ploughed, and the furrows are not, as a rule, fully covered up after the seed has been dropped in. The seed is proverbially small, and would be liable to be smothered, if buried as deep as wheat or gram. The harvest of rape is an early one, if the frost has not injured it.

Toria.

Toria, which is a late *kharif* or early *rabi* crop, has come largely into favour of late years, owing to the high price of oilseed, and has to a great extent supplanted rape, especially in Tarn Táran. It is grown on irrigated and unirrigated lands; the total area cultivated is roughly 13,000 acres, of which 5,000 acres are unirrigated.

CHAP. II A. Agriculture. Massar.

Massar furnishes the pulse best known to Europeans as *dal*. It is grown on recently thrown up *bet* lands, on the moist shelving lands which line the banks of the Sakki *nala*, and as a catch crop after rice on canal lands. It is especially liable to damage by frost in late February, a single night of which may ruin the whole crop. Otherwise it is a hardy plant and may be grown with success on the most unpromising soils. But the area under *massar* is small, and it is the least important of the pulses in Amritsar, except in the river villages, where it is a useful crop.

Senji.

Senji, a luxuriant trefoil is grown exclusively for fodder for cattle. It is cut green and chopped up with *bhusa*, *jowar*, maize stalks or cane tops. It is grown on maize and cotton stubbles almost invariably, less often after rice. The ground is first saturated with water and the seed is then puddled into the liquid mud by the feet of cultivator. Thereafter it requires no care, except a plentiful supply of water, and, from a Canal Officer's point of view, it is a most wasteful plant. Benefiting by the manure which had been applied to the cotton or maize which it succeeds, it grows fast and heavy and cutting of a few square yards is enough for a head load. Once cut it does not give a second cutting like lucerne, but directly a part of the field has been laid bare it is ploughed up to be ready for preparation for the cane crop which usually follows it on well lands. Altogether it is an indispensable crop for stall-fed cattle, and is grown in every village where there is irrigation. The large increase in its production, which has taken place of recent years, is probably due to the contraction of the area available for grazing in the Amritsar and Tarn Táran tahsils.

Hemp.

The hemp grown is of two varieties, *san* and *sankokra*. It covers an area of about 2,000 acres yearly, more than half of which is in the Amritsar tahsil. *Sankokra* is generally planted as a fencing round sugarcane or maize. *San* is only grown in sufficient amounts to provide the ropes necessary for agricultural purposes. It ripens in October, when it is cut and steeped in water, after which it is dried in the sun and worked by hand into ropes.

Vegetable and Fruits.

Melons are grown in the hot weather as an extra *rabi* crop. Most are grown in Ajnála, where some of the Arain villages are famous for them, and in the gardens and orchards near Amritsar especially in the Kamboh villages, but there are few wells with *maira* soil which do not grow a patch or two. Both the small yellow melon and the *kharbuza*, or large green water melon are grown, as well as cucumbers. As already stated they are often found in the same field as young cotton, and are out of the way before the cotton begins to shade them. Amritsar city, with its large Hindu population, is a good market for this kind of produce, and it is also sold a good deal in the villages, at cross roads, and at canal bridges. The fruit being easily stolen, fields at a distance from a well require watching day and night. Besides being grown on wells melons are raised on sandy lands in Ajnála, and in the Bet lands of both rivers.

CHAP. II, A. Agriculture. Vegetable and Fruits.

Other vegetables, mostly grown by Mohammadans, are onions, carrots, radishes and potatoes. The latter are largely planted on the rich lands round Amritsar city and now form a regular item in a recognized two year rotation. The value of this crop often reaches Rs. 350 per acre. Of fruits the commonest varieties are mangoes, oranges, plantains, peaches and mulberries, the value of which varies between Rs. 250 and Rs. 400 per acre. Many fields are planted with rose bushes for the manufacture of *itr*.

Tobacco.

Tobacco is only grown on well lands out in the district, but heavy crops are taken off the lands near the city with the help of black liquid sewage which serves both as manure and water. The Sikhs having a prejudice against growing what their religion forbids them to use, the cultivation is confined to Mohammadans, especially Arains. As might be expected Ajnála produces more tobacco than the other two tahsils together, and there it is very carefully cultivated. The average of the selected years shows that out of 2,736 acres devoted to tobacco cultivation, 1,849 are in Ajnála, where it is principally grown in the Arain estates of the Sailab and Hithar circles. The commonest kind is that with a pink flower spike, which at a certain stage is pinched off to check upward growth and to make the lower leaves spread out.

Nomenclature of staples.

The different staples have in the above paragraphs been referred to by their popular or vernacular names. For purposes of identification the following table is given, showing the English, vernacular and scientific names in juxtaposition :—

English.	Vernacular.	Scientific.
Rice	Jhona	Oryza Sativa.
Maize	Makei	Zea Mays.
Sugarcane	Kamád	Saccharum Officinarum.
Cotton	Kapáh	Gossypium Herbaceum.
Great millet	Jowár	Sorghum Vulgare.
Spiked millet	Bajra	Penicillaria Spicata.
Pulses	Moth	Phaseolus Acontifolius.
	Mungi	Do. Mungo.
	Másh	Do. Radiatus.
Oilseeds	Toria	Brassica Juncea.
	Til	Sesamum orientale.
Italian millet	Kangni	Pennisetum Italicum.
	Swánk	Oplismenus Frumentaceus.
	China	Panicum Muliacrum.
Egg plant	Baingan	Solanum Melongena.
Wheat	Kanak	Triticum Aestivum.
Barley	Jao	Hordeum Hexastichum.
Gram	Chole	Cicer Arietinum.
Linseed	Alsi	Linum Usitatissimum.
Lentil	Masar	Ervum Lens.
Trefoil	Senji	Melilotus Parviflora.
Rape	Saron	Brassica Campestris.
Tobacco	Tamákú	Nicotiana Tabacum.
Poppy	Post	Papaver Somniferum.
Potatoe	Alu	Solanum Tuberosum.
Melon	Kharbuza	Cucurbita Melon.
Water Melon	Tarbúz	Cucurbita Citrullus.
Onion	Gande	Allium Cepa.
Carrot	Gájar	Daucus Carota.
Raddish	Muli	Raphanus Salivus.
	Maddal	Eleusyne Corocana.

CHAP. II, A.
Agriculture.
Changes in agricultural system.

As regards the changes in the system of husbandry, that have been, and are, taking place, it may be noted that within the last 20 years an expansion of the *rabi* crop area and a contraction of the *kharíf* area has been slowly going on. With this there has been an increasing resort, in the *kharíf*, to the more valuable crops, and an abandonment of the inferior cereals, such as *kangni*, *swank*, *chína*, *maddal*, and *bájra*. Canal irrigation has of course had an effect on the area under rice, but improved communications, rise in prices, and facility for export, have no doubt been the causes which have led to more wheat being grown. The increase in the area under cotton with the corresponding decrease under sugarcane and the reasons for the change have already been commented upon. Among other changes gram has given way to *berrera*, and all kinds of oilseeds are more raised than formerly, while each year, as the grazing areas narrowed, the necessity for growing *senji* and green *jowar* on the irrigated lands has become more pressing. Increased facilities for the disposal of surplus produce and increase of irrigation have naturally had the effect of making the people grow fewer, but more valuable crops in the *kharíf*, and so leave more room for the raising of wheat, the grain which finds the readiest export.

Cultivated area.

Slightly more than 75 per cent. of the total area of the district is under cultivation. As between the different tahsils the proportion is highest (83 per cent.) in Tarn Táran; the figures for Amritsar and Ajnála are 80 per cent. and 58 per cent. respectively. The two southern tahsils are thus very closely cultivated and there is no room for any further expansion. During the past twenty years the cultivated area has as a matter of fact contracted by 2 per cent. in Tarn Táran and 1 per cent. in Amritsar. The saline efflorescence, which appeared after the disastrous floods of August 1908, is mainly responsible for this, as the fields affected have not yet been recovered for cultivation. In Ajnála the same causes have been at work, causing slight decreases in the Nahri, Uthar and Hithar circles, and in addition some of the lighter sandy lands have been abandoned owing to recent unfavourable seasons. Cultivation in the Sailab circle has decreased by 19 per cent. owing to the steady set of the Ravi towards its left bank, which has converted many square miles of fertile sailab land into unculturable sand or jungle. This area, together with the wide stretches of saline waste, accounts for the high proportion of uncultivated land in Ajnála.

Land Improvement and Agriculturists' Loans Acts.

Advances under the Land Improvement Loans Act are as a rule properly applied to the improvements for which they were obtained, principal and interest are recovered without difficulty when they fall due, and there are few arrears. The table given below shows the advances and collections of principal and interest

CHAP. II, A. Agriculture. Land Improvement and Agriculturists' Loans Acts.

in the past six years:—

Year.	Balance outstanding at the commencement of the year.	Amount advanced during the year.	RECOVERIES.		Balance at close of year.
			Principal.	Interest.	
1907-08	13,321	4,405	1,907	544	15,819
1908-09	15,819	4,640	3,127	921	17,332
1909-10	17,332	600	2,879	558	15,058
1910-11	15,058	725	2,886	1,207	12,897
1911-12	12,897	5,200	2,985	1,088	15,112
1912-13	15,112	4,760	2,769	1,287	17,103

Loans under this act and also under the Agriculturists Loans Act are chiefly given in Ajnála tahsil. The figures below show the advances and collections made under the latter Act:—

Year.	Balance outstanding at the commencement of the year.	Amount advanced during the year.	RECOVERIES.		Balance at the end of the year.
			Principal.	Interest.	
1907-08	19,348	25,410	15,005	810	29,753
1908-09	29,753	12,844	19,276	1,305	23,321
1909-10	23,321	13,952	22,472	1,156	14,801
1910-11	14,801	3,050	10,558	871	7,293
1911-12	7,293	26,500	12,125	661	21,668
1912-13	21,668	7,050	19,105	895	9,818

The large amounts advanced in 1907-08, were required by the early cessation of the monsoon rains. In 1911-12 a hail-storm in March and the scarcity of fodder owing to drought necessitated an even larger advance for the purchase of seed and fodder. Even in that year, however, no difficulty was experienced in the recovery of principal and interest.

Agricultural Banks.

Agricultural Banks have not taken such a hold on the people of this district, as they have in the neighbouring districts, of Gurdaspur and Hoshiarpur. During the last two years there has, however, been some awakening of interest in them. The following account has been supplied by the Registrar of Co-operative Credit Societies in the Panjab:—

"There are 27 Co-operative Societies in Amritsar district of which 2[?] "are agricultural and 1 non agricultural (trade). Twenty agricultural and "1 non-agricultural society are included in the Ramdiwali Union, with "headquarter at Ramdiwali, Ajnála tahsil.

CHAP. II.A.

Agriculture.

Agricultural Banks.

"The 26 agricultural societies have a membership of 1,124 and a "working capital of Rs. 78,974. The share capital is Rs. 43,804, members "deposited Rs. 6,797 and the total is composed of deposits from non-members, "loans from the Union and profit: Rs. 67,679 were given out on loan to "members during the past year and Rs. 38,406 repaid.

"Seventeen of the agricultural societies are Musalman and 9 Sikh. "They have practically all been started during the last 2 years, principally "by the exertions of Chaudhri Barkat Ulla of Ramdiwali who is Honorary "Sub-Inspector of Co-operative Societies for the district. Chaudhri Ali "Muhammad, President of the Ramdiwali Union and Tahil Singh of Udoke "are useful co-operators.

"Many applications to start new societies in the district have been re"ceived but these cannot be entertained until the inspecting staff is in"creased."

Sales and Mortgages of land.

The statistics compiled during the recent settlement show that 3·1 per cent. of the cultivated area has been sold to agriculturists and 1·3 per cent. to others during the past twenty years, making a total of 4·4 per cent. 17·4 of the cultivated area is now mortgaged with possession but of this 13 per cent. is mortgaged to agriculturists and only 4·4 per cent. to others. The following is a quotation from the final settlement report of 1914:—

"The small proportion of land transferred by sale is evidence of the "general prosperity of the proprietary body. The prices given in the "following statement understate the present selling value of land:—

Sales since 1893 Settlement.	To ZAMINDARS.		To OTHERS.		TOTAL.	
	Percentage of cultivated area 3·1.	Price per acre Rs. 201.	Percentage of cultivated area. 1·3	Price per acre Rs. 213.	Percentage of cultivated area 4·4.	Price per acre Rs. 222.
		Rs.		Rs.		Rs.
Mortgaged with possession existing now ...	13·0	150	4·4	126	17·4	144

"In the quinquennium from 1906 to 1911 the average price for each "cultivated area sold was Rs. 287 in Tarn Táran, Rs. 245 in Amristar and "Rs. 165 in Ajnála. In the Amritsar tahsil the prices realised for building "sites near the city have been excluded in calculating the averages.

"During the currency of the last settlement the value of land has "risen by 11 per cent. in Tarn Táran and by 73 per cent. in Amritsar. In "Ajnála the advance has been 7 per cent. only but the fact that most "transactions in this tahsil include an appreciable area of waste detracts "from the accuracy of the statistics. In all three tahsils the proportion of "land mortgaged is slightly higher than 20 years ago, but much lower than "before the Land Alienation Act of 1901 came into force. In Amritsar "and Tarn Táran a smaller fraction of land is mortgaged than in Batala, "the richest tahsil of the neighbouring district of Gurdaspur. In Ajnála "the proportion is higher, but even here two-thirds of the mortgages are "held by agriculturists. Except in certain parts of the Sailab and Hithar "Circles there is no serious indebtedness, and in all tahsils the area "redeemed has in recent years exceeded the area mortgaged.

CHAP. II, A.

Agriculture.

Agricultural Stock.

Table No. 22 shows the live stock of the district, as ascertained at the latest enumerations. Amritsar is not a district in which cattle are bred to any great extent and consequently the majority have to be imported from other districts. The grazing area is very limited and the great bulk of the working and milch cattle are stall-fed. Twice a year the people have the opportunity of buying and selling at the Baisakhi and Diwali fairs, but they also buy largely from itinerant cattle-dealers, called Hers, who travel up from the Hissar and Delhi country, with picked animals suitable for cart and well work. Both bullocks and male buffaloes are used on the wells and there is not the prejudice against yoking the latter which exists in the Cis Sutlej districts. The large increase in the price of live stock of all classes, which is noted later on in this chapter, has had the effect of causing the Amritsar farmer to prefer the cheaper buffaloe to the more efficient bullock. This fact and the supersession in certain tracts of wells by canal irrigation, have resulted in a continuous decrease during the past two decades in the number of bullocks and cows, and an almost corresponding increase in male and milch buffaloes. Whereas in 1893 the proportion of kine to buffaloes was two to one, it is now roughly six to five. Buffaloes certainly work more slowly and are not always so docile as well trained bullocks, but the figures show how largely they are coming into use. It is, however, chiefly due to the preference for milch buffaloes over cows that the figures have changed so much ; most zamindars regard the milch buffaloe as a hardier animal and a better milker than the cow. Except for the buffaloes, most of the cattle bred in the district are of a poor stamp, but the stock is generally sufficient for agricultural purposes except in the trans-Sakki circles of Ajnála, where the cattle are specially weak and under sized. Young stock are castrated at from two to three years old, and are then given over to oilmen, who make a profession of training them to the yoke. Often this is carried out after dark. As a rule a landholder does not keep more cattle than are necessary to work his well and plough, and to keep him and his family in butter milk. There is no great trade in *ghi*, though the Kamboh villages near Amritsar make some profit in this way. In the city large herds of milch cattle are kept by Gújars, who in the hot season take them out to the waste lands near the city, and in Ajnála, for months at a time and keep them there bringing in the milk daily. Or else they lease for grazing one or other of the rakhs in the district, or lengths between bridges of the canal bank. The village cattle during the rainy and hot weather months are driven out every day, but if they depended on what they could find by the roadsides, on the *kalar*, and on the wheat stubbles, they could not be kept in condition. It is for them that the large areas of fodder, and *senji* are grown, and the up-keep of his cattle in times of scarcity is a source of constant anxiety to the cultivator. There are no special breeds of cattle requiring mention.

CHAP. II, A.

Agriculture.

Agricultural Stock.

Horses and ponies are numerous and have increased 9 per cent. since the last settlement. Not that the breed is in any way remarkable but they are largely used by small traders, who fetch their supplies in *rarrys* drawn by ponies, and they are often seen as pack animals. The Sikh Jat looks on a horse or pony simply as an animal which enables him to get from place to place with comfort, and they take little pride in their animals, and so far do not show any marked desire to improve the breed. Every well-to-do Jat and trader keeps a pony of some sort. Sheep and goats are kept by village menials, chiefly by Barais, the sheep for their wool and goats for their milk and for slaughter. For goat flesh as well as for nearly every other commodity Amritsar city is the market, and some 300 goats are daily slaughtered there for food. Mules and donkeys are largely used in the carrying trade as pack animals, chiefly on the roads to the north of the city, to Gujránwála, Fatehgarh, Siálkot and Batála. Their number has decreased steadily in Tarn Táran since the opening of the Tarn Táran Patti Branch of the Railway. The donkeys are kept by Kumhárs, many of whom have given up their proper trade (especially in Tarn Táran, where so many wells have been closed in favour of canal irrigation), and taken to carrier's work. The Kumhár's donkey is in fact almost the only beast of burden in general use among the villages for goods which are easily divided up into loads like grain. A good donkey will carry two maunds. Camels are few, and it is doubtful whether all those entered in the return belong to this district, where there is so little suitable grazing ground for them. Where kept at all they are owned by Sikh Jats and Mazbís and are used solely as beasts of burden, very rarely for riding purposes. Carts are comparatively few. The Beás seems to be the dividing line between the parts of the province where these are numerous, or comparatively rare, and far the most are kept in the sub-mountain districts from the Beas to the Jamna.

Prices of cattle.

Prices of stock have risen enormously during the last twenty years. A comparison of the average prices prevalent at last settlement with those of the present time, supplied by the Chief Superintendent, Civil Veterinary Department, Punjab, illustrates the extent of this rise. The figures are as follows :—

	PRICES IN RUPEES.	
	Last Settlement.	Present day.
Bullock	40	150
Cow	25	100
Male buffalo	20	40
Female buffalo	50	150
Camel	80	150
Goat	4	10 (male), 15 (female)
Sheep	3	5

CHAP. II, A.

Agriculture.

Prices of cattle.

The price of milch cows is regulated by the number of *seers* of milk given. Near the city the calculation is made on a basis of Rs. 12 *per seer*, but at the fairs fancy prices are very often obtained.

Horse breeding.

Horse-breeding operations under Government supervision were first started in Amritsar at the end of 1881, when the branding of mares fit for breeding purposes was introduced, and stallions were distributed by the Department of Horse-breeding operations. Horse-breeding has now, however, been placed under the control of the Army Remount Department. At present there are 17 horse (ten of which are the property of the District Board) and 15 donkey stallions standing in the district. The best results have been obtained in the Tarn Táran tahsil, which has the best breed of mares. The District Board has been increasingly active in this direction; in 1893 they bought three Arab pony stallions for breeding purposes and now possess ten. Mares suitable for breeding purposes are brought to the half-yearly fairs for branding and there are now 764 branded mares in the district. Mares fit for mule-breeding are not now branded. Complete figures are given in table 23, but the following abstract shows the progress which has been made during the last twenty years :—

	Number of Horse Stallions.		Number of Donkey Stallions.		Total number of Branded Mares.		Number of Fillies and Colts out of Branded Mares.		Number of Mules foaled.
	Imperial.	District Board.	Imperial.	District Board.	Imperial.	District Board.	Imperial.	District Board	Imperial.
Average of 3 years ...	5	4	7	...	335	...	53	26	146
1893-94, 1895-96, 1911-12...	7	10	15	...	764	...	92	299	144

The popularity of mule-breeding has declined considerably of recent years.

Irrigation canals.

All four branches of the Bari Doab Canal run through the district, *viz.*, the Sobraon, Kasur, Main and Lahore branches and the figures on page 89 show that one-third of the total cultivated area of the district is canal irrigated. Tarn Táran tahsil derives the greatest benefit from this source, 47 per cent. of its cultivated area being returned as *nahri*.

The original project for the canal was drawn up in 1850, shortly after annexation. Some modifications of the original design were found to be necessary, and a revised estimate was submitted in 1856. The canal was formally opened in 1859, and irrigation commenced in the following year. The head works are situated on the left bank of the river Ravi near Madhopur, in the Gurdaspur District.

CHAP. II. A. Agriculture. Irrigation canals.

Considerable engineering difficulties were here encountered, owing to the Chakki and other hill torrents and natural drainage lines crossing or approaching near to the line of the canal, but these were successfully surmounted. The canal runs in one channel for 30 miles, after which, near to the civil station of Gurdáspur, a branch is taken off, which, seven miles further on, is divided into the Sobráon and the Kasur branches. From the former of these branches, both of which pass through the Amritsar District, irrigation is supplied to the country between the high bank of the Beas and the Patti drainage line, and from the latter to the tract lying between the Kasur and Patti lines. The Sobráon branch waters 63 villages in the Amritsar tahsíl; the rest of the villages commanded are in Tarn Táran. The Kasur branch irrigates mainly in Tarn Táran. At Aliwal in the Batala tahsíl of Gurdáspur the Lahore branch takes out of the main canal. Below this point the main canal is known as the Main Branch Lower and serves the country between the Kasur *nala* and the Hudiara drainage line. It crosses the Grand Trunk Road within three miles of Amritsar city. The Lahore branch traverses the southern border of the Ajnála tahsíl and waters the tract between the Hudiara line and the Sakki *nala*.

The distributaries thrown off by each of these four main branches and watering within the Amritsar district, are as follows:—

Sobráon Branch	14	distributaries.
Kasur Branch	9	Do.
Lahore Branch	10	Do.
Main Branch Lower	13	Do.

Of the 13 distributaries from Main Branch Lower, five are in the second Division and eight in the third Division. Three distributaries, *viz.*, the Aliwal, Kotla and Fatahgarh take off just above Aliwal from the Main Branch Upper, which is the name given to that portion of the canal, which runs from Tibri to Aliwal in the Gurdáspur district in order to distinguish it from the Main Branch Lower.

Inspection rest-houses are provided at the following points. The distances are given in miles from the point at which the branch enters the district, and the list excludes unfurnished *chaukis*, which are rarely used except by Indian subordinates :—

Sobraon Branch.	Miles.
Gaggarbhana	3
Raya	9
Khwaspur	22
Dilawalpur	29
Khara	35
Dhota (on the Bhindar distributary) ...	20
Naushera (on the Patti do.) ...	32

CHAP. II. A.
Agriculture.
Irrigation canals.

Kasur Branch.	Miles.
Bhoewal	2
Jandiala	12
Pakhoki or Deo	19
Rasulpur	27
Jaura	33
Main Branch Lower.	
Kathunangal...	7
Ibban	22
Bhuchar	35
and on distributaries—	
Dhing Nangal	5
Chawinda	16
Doburji	17
Lalu Ghuman	25
Kasel	28
Lahore Branch.	
Majjupura	7
Ranewali	13
Bagga	17
Kohali	21
and on distributaries—	
Bhuregil	12
Ugar Aulakh	16
Lopoki	24

Each of the four principal branches is bridged at intervals of about four miles, and good cart-roads are maintained along the outer boundary of the spoil bank. Since last settlement several flour-mills have been built at various points on the canal, where a fall provides the necessary water-power. These are, as a rule, worked by *panchakkis* or water-wheels. There are mills at Ranewali and Kohali on the Lower Branch at Raya and Nagoki on the Sobraon Branch, at Bhuchar on the Main Branch Lower and at Pakhoki, Allahdinpur and Jaura on the Kasur Branch, while at Tarsika, which is also on the Kasur Branch, there is an oil-crushing factory, worked by water-power from the fall there; this factory, owing to the failure of the lessee, is at present not working but it will probably be re-started shortly.

For administrative purposes, the canal is worked in four Divisions, each under an Executive Engineer. The first Division has its headquarters at Gurdáspur and includes the whole of the main Branch from Madhopur to Tibri and of the Main Branch Upper from Tibri to Aliwál. The headquarters of the second, third and fourth Divisions are at Amritsar; in the second Division are the Lahore Branch and that portion of the Main Branch Lower, which lies between Aliwál and the Grand Trunk Road. The third Division comprises all the Main Branch Lower, south of the Grand Trunk Road, and the fourth Division the whole of the Kasur and Sobráon Branches. The office of the Superintending Engineer, to whom the Executive Engineers are subordinate, is also at Amritsar. His Circle of superintendence includes the Central Canal Workshops

CHAP. II, A. Agriculture. Irrigation canals.

which are reckoned as a Division and do work not only for the Irrigation Department of the Punjab, but for other Departments, both in the Province and outside it, such as the United Provinces, Baluchistan and the North-West Frontier Province.

In the Gazetteer of 1893 the opinion was recorded that canal irrigation in Amritsar was not capable of extension ; a comparison of the average figures for the five years ending with 1891-92 with those given below shows how entirely wrong this idea was, for the area irrigated in 1912-13 was nearly double the average of the earlier quinquennium. The figures are as follows :—

Year.	Acres irrigated. Kharif.	Rabi.	Total.
1908-09	161,723	173,510	335,233
1909-10	146,271	161,599	307,870
1910-11	146,437	187,208	333,645
1911-12	156,393	222,041	378,434
1912-13	171,343	203,556	374,899
Average of above 5 years	156,433	189,583	346,016
Average of five years ending with 1891-92	79,483	114,993	19[illegible],676

The above figures are for the Amritsar District only and were supplied by the Superintending Engineer. On the whole canal the *kharif* area of 1913 and the whole area for the year 1912-13 were both records.

The table that follows illustrates the growth of irrigation from the whole canal during the past 25 years of its existence. In 1887-88, as now, the canal took the whole supply in the river during the winter months, but was not able to do so during the summer months ; its capacity has, since that year, been gradually increased :—

Year.	Area irrigated in acres.			Average daily supply utilized.		Duty on supply utilized.		Average occupier's rate assessed in rupees per acre.	
	Kharif.	Rabi.	Total.	Kharif.	Rabi.	Kharif.	Rabi.	Kharif.	Rabi.
1887-88	206,855	266,610	473,465	3,149	2,133	66	125	2·88	2·21
1892-93	238,518	329,378	567,896	3,414	2,676	70	123	4·03	3·53
1897-98	384,857	464,217	849,074	2,739	4,704	82	170	3·92	3·47
1902-03	440,852	453,010	893,862	5,135	2,045	86	222	3·68	3·35
1907-08	437,268	470,248	907,516	5,025	2,140	87	202	3·62	3·36
1912-13	552,032	618,684	1,070,710	5,831	2,486	103	249	3·81	3·48

CHAP. II.A.
Agriculture.
Irrigation canals.

The rates charged for the various crops under the schedule of occupiers' rates in force on the Bari Doab Canal are as follows :—

Class.	Crop.	Flow.	Lift.
		Rs. a. p.	Rs. a. p.
I	Sugarcane	7 1 0	3 8 6
II	Rice	6 0 10	3 0 5
III	Orchards, gardens, tobacco, vegetables and melons ...	4 8 8	2 4 4
IV	All dyes, fibres, and oil-seeds ; all *rabi* crops, except gram and *massar*.	3 12 6	1 14 3
V	All *kharif* crops not specified above ; gram and *massar* ; all fodder crops.	2 12 5	1 6 2½
VI	Special rate, a single watering before ploughing for *rabi* followed by a *rabi* crop.	2 0 4	1 0 2
VII	A single watering before ploughing not followed by a crop. Crops grown on the stubble of a previous crop.	1 0 2	0 8 1

Class *VII*, a single watering before ploughing not followed by a crop, is only charged if the watering is taken before the 20th August for the tillage of land for the following *rabi*. Under the orders conveyed in Punjab Government letter No. 126 Revenue, dated 24th August 1911, the charge is to be remitted, if the watering is followed by a *rabi* crop.

The class of *kharif* crops watered may be roughly summarized in the following percentages :—

Sugarcane	6
Rice	27
Cotton	20
Maize	20
Fodder and other non-food crops	24
Vegetables, fruit, oilseeds and pulses ...	3
	100

For *rabi* crops the figures are :—

Wheat	38
Barley	2
Gram	14
Mixed wheat and gram	13
Fodder and other non-food crops	27
Vegetables, *massar*, tobacco, oilseeds ...	6
	100

The figures given at the time of the last settlement were :—

Kharif crops.	Sugarcane	9
	Rice	30
	Cotton	5
	Maize	30
	Jowar	5
	Gardens, vegetables, oilseeds and pulses ...	21
		100

and the *rabi* crops :—

Wheat	56
Barley	2
Mixed grain	6
Gardens, vegetables, grain, *massar*, oil-seeds and trefoil	36
	100

A comparison of the two sets of figures seems to justify the view that the extension of irrigation from canals has resulted not in the wider cultivation of the more valuable crops, such as wheat, rice and sugarcane, but in the greater use of canal water for inferior and fodder crops.

Wells.

Of the total cultivated area of the district 29 per cent. is watered by wells, which thus account for 44 per cent. of the total irrigation. In the Amritsar tahsil the *chahi* area has decreased of late years concurrently with the increase of canal irrigation, except in the Jandiála circle, where there has been considerable activity in sinking new wells. Despite this decrease in the area irrigated, the number of wells in use or fit for use in the tahsil has risen by about 13 per cent. since 1893. Some of these are used merely to supplement canal irrigation. In Tarn Táran no less than 709 wells are recorded as fit for use but are at present lying idle : these wells would be brought into use in case of any failure in the supply of canal water. In Ajnála for some years there has been a slight but steady decline in the number of wells actually working ; in some portions of this tahsíl the wells soon become exhausted and it is seldom that one can be worked for more than 10 or 12 hours at a stretch. The total area irrigated fluctuates from year to year much more than in Amritsar. In the whole district there are 12,138 wells in use or fit for use of which 1,390 are double wheeled. The following table shows the capacity of wells in each tahsíl :—

	Average area per well.	Average area per wheel.
Ajnála	18	18
Amritsar	25	21
Tarn Táran	25	21

The Persian wheel apparatus.

The well-apparatus is always of the well-known Persian wheel type, except in some of the shallow unlined wells in the Beas and Ravi riverain areas, where the bucket lift or *dhinkli* is used.

The Persian wheel may be roughly described as a string of earthen pots (or sometimes tin buckets) placed, one above the other, on a rope ladder hung over the water on a broad vertical wheel.

CHAP. II. A. — Agriculture. — The Persian wheel apparatus.

The pots reach a short way below the level of the water, and as the wheel, worked by oxen, revolves, the pots on one side come up full, and empty themselves into a trough whence it flows out into the surface irrigation channel, while those on the other side go down empty. The apparatus of cogged wheels is known as the *chakla chob*, or *jora*, the well itself as *ku*, and the rope ladder arrangement as a *mahl*. A double well is known as *dohatta*, or *doharta*, or *domahla*. The method by which the water is raised in a leather bag, or *charsa*, at the end of a rope, working over a pulley or *vidh* is not known in Amritsar.

From three to five pairs of bullocks are required to work a well continuously for 24 hours, and at least two men, one of whom sits in the *ghari* to drive the bullocks, and the other remains out in the field directing the water into the *kiaris* or compartments, made by small ridges of earth for convenience of irrigation. About two bighas can be watered in this way in 24 hours, but the area will vary according to the depth from which the water has to be raised, the distance of the field from the well, the slope, and the nature of the soil through which the water has to travel. The apparatus costs from Rs. 50 to Rs. 60 and will last many years, if well built of sound well-jointed wood at the first, but the rope ladder soon wears out after a couple of months constant work and soaking. Each family using the well then takes it in turn to replace it. The cross sticks, forming the steps of the rope ladder, to which the pots are fastened, can be used again, but new *munj* rope has to be twisted for the rest of the tackle. The pots are supplied when wanted by the potter, who, in return for certain dues paid at harvest time in grain, is retained by the sharers in the well. Each sharer works the well in turn, one turn being generally three hours ; the order is determined by lot, and a sharer has to take up his turn at whatever time of day and night it falls, unless he effects an exchange. Many of the double wells have only been started in order to provide more frequent turns, for it may happen that the sharers are so numerous that a man's turn comes round after so long an interval, or lasts for so short a time, that it does him little good. This leads to the secession of some among the sharers, and the rigging up of a second wheel.

Water level.

Throughout the district water is found almost everywhere quite close to the surface, making well-irrigation comparatively easy. Close to the high bank of the Beas the depth to water varies from about 60 feet in the North of the Amritsar tahsil to 36 feet in parts of Tarn Táran. As the surface of the country slopes gently down to the basin in which Amritsar city lies, the water level gradually rises, till in the civil station and other environs of the city it is only some 7 or 8 feet below the surface. In the canal irrigated area of Ajnala it sinks again to some 14 or 16 feet, thereafter rising gradually as the Ravi is approached to about 10 feet. Twenty years ago it was estimated that the water level had risen in the previous 30 years about 10 feet in Amritsar and to a smaller extent in the other

CHAP. II.B. Rents, &c. Water level.

tahsíls, owing to the infiltration from the canal. Since then there has been a further steady rise, which cannot be put at less than 6 feet where canal irrigation is most profuse.

Although well irrigation is thus easy and profitable, it appears unlikely that there will be any large increase in the number of wells in the future, save possibly in those parts of Ajnála, which cannot be reached by the canal.

The cost of sinking a well varies of course with the depth; where the water level is highest a rough estimate would be from Rs. 150 to Rs. 200, while near the bank of the Beas, where the water is deepest, it may run to as much as Rs. 500 or Rs. 600.

It is impossible to say for certain how long a well will last. Much depends on the care with which it has been built, the composition of the stratum on which it rests, the absence of *kalar* in the clay of which the bricks are made and other considerations. But there is no doubt that many wells are at work now, which were built close on a century ago. They are of course subject to many defects, all of which are well known to the people by different names. A cave may form in the side of the cylinder, the spring may be insufficient, or be choked by the clay through which it has to come, or there may be an inblow of sand interfering with the draught of water. Yet many wells continue to work for years with defects which seriously interfere with the supply of water, and the rise in water level, which has taken place all over the district, has had the effect of making workable wells which long ago were abandoned on account of some defect. An abandoned well is known as a *kodal* and these are sometimes traced and unearthed, long after they had been filled up level with the ground, by the aid of *senghes*, or wiseacres who make a profession of this. In the Bet, grass-lined wells are used by Aráins to water about half an acre of vegetables. On these a pole, working on a fulcrum, weighted at one end with clods and dipping a large earthen pot suspended by a rope from the other, is worked at the cost of much manual labour.

(Section B.—Rents, Wages and Prices.)

Tenancies.

There are a few large *zamindari* estates in the district, some of the leading Sikh Sardárs and other *Raises* being comparatively large land-owners, but only in two or three cases do their holdings extend beyond a few hundred acres. The district as a whole is essentially a tract of small peasant proprietors. There are comparatively few of what have been called the tenant tribes, such as Arains, Kambohs or Sainis, and these are mainly found in Ajnála. Ordinarily the tenant is either himself a small proprietor, whose holding is insufficient for the maintenance of his family or more commonly, especially in Tarn Táran, a member of one of the menial tribes. Rents are determined by the relative strength or

CHAP. II.B.
Rents, &c.
Tenancies.

weakness of the owner's position in regard to his tenant; wherever a smaller rate of *batai* or smaller cash rent than usual on similar lands in the neighbourhood is paid, it is generally found that the owner is an absentee, having emigrated either to one of the canal colonies or on military service, and that he has let his holding to a relative on favourable terms.

Zabti rents.

Zabti rents are almost unknown in Amritsar tahsíl, where they are only found in one or two villages of the Mirankot and Nahri circles, chiefly on fodder crops at the rate of about Rs. 2 per *bigha*. In Tarn Táran they are found only in Atari and in one or two of the Maharaja of Kapurthala's villages. They vary from Rs. 16 to Rs. 4-8-0 per acre according to the crop. In the Khatri village of Hashimpura in Ajnála cane pays Rs. 4 and cotton Rs. 3 per bigha.

Ijara rents.

In Raja Sansi, one of the largest estates of the Ajnála Nahri circle, and in some of the villages immediately adjoining Amritsar city the *ijara* form of tenure is common. The following account is taken from the Assessment Report (1912) of the Amritsar tahsíl :—

"Under this system the owner ploughs the land, pays all the land "revenue and irrigation charges, and in a few cases provides the manure. "The tenant or *ijaradár* sows, weeds, watches and as a rule manures the land "and takes the whole of the crop. His lease is renewed annually or after two "years and he pays a fixed sum, usually Rs. 50 or Rs. 60 per *bigha* as rent. "The system is often complicated by sub-letting and it is a common practice "for a landlord to lease his land for a term of 10, 15 or 20 years to a *musara* "*miadi* or term tenant. The latter pays a cash rent of Rs. 30 or Rs. 40 "per acre and meets all charges on the land, keeping the whole of the "crop."

Rents in kind.
(*a*) The *chikota* system.

Rents in kind are of two descriptions. The tenant either contracts to pay a fixed weight of grain or else to allow the landlord to take a certain share of the produce, usually one-half. The area paying rents of the former description has increased since 1893 from 5,746 to 9,491 acres in Amritsar tahsíl, from 1,264 to 15,866 acres in Tarn Táran, in Ajnála from 6,183 to 9,494 acres. This increase would at first sight seem to contradict the inference that the landlord has the upper hand over the tenant. But it is very doubtful whether these fixed grain rents are really more advantageous to the tenant than the system of dividing the produce. Fixed kind rents are paid, as a rule, only on secure irrigated land and are supposed to be roughly equivalent to half the produce. The commonest rate is five maunds *per bigha*, or roughly five standard maunds per acre on irrigated land, though in exceptionally fine villages rents of six, seven and even eight maunds per *bigha* are not uncommon. The whole amount paid, less the land revenue demand is clear profit to the landlord, as the tenant is responsible for all expense of irrigation and for all menials' dues. In a few villages in Tarn Táran the tenant actually pays the land revenue as well as the canal dues, but the landlord in such cases receives no

CHAP. II, B. Rents, &c. (a) The chikota system.

share of the straw. On unirrigated land the rate is generally from two to four *kacha* maunds *per bigha* in Amritsar and in Ajnála two *kacha* maunds per acre on barani land and three *kacha* maunds per acre on *sailab*, but considerable variations occur from village to village.

(b) The batai system.

The following quotations from the assessment reports of the three tahsils exhibit the prevailing rates of *batai* rents :—

Tarn Taran.

" On *chahi* land one-third is the commonest rate of *batai*, one-half or two-" fifths being taken only when the well is not worked or where the landlord " contributes to the cost of manuring. On *nahri* land the landlord usually " receives one-half the produce, but he occasionally agrees to take less if " the water supply is deficient, as, for example, at the tail of a distributary, " or if the tenant becomes responsible for all the canal dues. On *barani* " and *sailab* lands, one-half is much the commonest rate, but one-third is " usually taken on the light, sandy soils found close to the edges of the " drainage lines, where *chari*, *moth* and *bherrera* are the only crops grown. It " is very rare to find the landlord supplying a share of the seed. Where he " does so, he generally exacts a small cash payment in addition to his share " of produce."

Amritsar.

" One-half is much the commoner share of the produce taken on all " classes of land. On well lands in Mirankot and the Bet Bangar, however, " one-third is usually paid. In other circles this share is only occasionally " taken in the case of sugar-cane and cotton, or on *nahri* land where the " owner wishes to be relieved of all responsibility for the canal dues. A " two-fifths share is fairly common in certain villages in Jandiála and in the " Bet Bangar. One-fourth of the produce is practically only found in some " of the poorest Mirankot villages. Elsewhere a landlord taking this rate " receives a cash payment in addition. Where the landlord contributes to " the cost of the seed the tenant, as a rule pays an equivalent share of the " land revenue."

Ajnála.

" The share of the produce is nearly always one-half, except in the case " of sugarcane on which two-fifths is commonly paid. A one-third or one-" fourth share is only accepted when the field is exceptionally poor, or when " the tenant makes a cash payment in addition. Occasionally a tenant who " breaks up waste land will stipulate for a reduced rate for the first year or " two of his lease."

Cash rents.

Excluding tenants who merely pay the revenue demand with or without an additional *malikana*, 15 per cent. of the cultivated area in Tarn Táran, 23 per cent. in Amritsar and 13 per cent. in Ajnála is leased to tenants paying cash rents. In Tarn Táran and Ajnála the area under cash rents is less than at last settlement, but in Amritsar, where there is a comparatively higher proportion of unirrigated land and consequently more inducement for the landlord to take the less speculative form of rent, it is slightly larger. This fact further exhibits the growing tendency for the landlord to insist on payment by a share of the produce of the rent of irrigated soils and to prefer payment in cash on unirrigated land, where he runs no risk of loss if the crop fails. On *nahri* land he is sometimes willing to accept a cash payment, as though possibly less profitable than a share of the produce it relieves him of all responsibility for the

CHAP. II.B. Rents, &c. Cash rents.

canal charges and saves him from contact with a second set of officials. Rents are always stated in terms of rupees to the *bigha* and vary from about Rs. 14 per acre for the best *nahri* fields and Rs. 5 per acre for inferior *barani*. The rise in cash rents during the past twenty years has been very remarkable, particularly in Tarn Táran, where it is calculated that the advance has been one of 66 per cent.; the figures for Amritsar and Ajnála are 39 and 25 per cent. respectively. An account of the various methods employed to calculate this rise will be found in paragraph 36 of the Ajnála Assessment Report. So long as there is any chance of the tenant paying up, it is unusual for the landlord to remit any part of a cash rent in bad seasons. It is only on valuable lands, or where the landlord's holding is very large, that written agreements are made. As a rule, the contract is an oral one.

Wages.

Amritsar city is the only large labour centre in the district. The following figures give the rates of daily wages in annas and pies (including the money value of any supplement in kind) most commonly paid to certain classes of labour and are taken from Table A of the Report on the wages Survey of the Punjab for 1912 :—

	WAGES PER DIEM PAID TO					
	Workers in iron and hardware.	Brass, copper and bell-metal workers.	Carpenters.	Cotton weavers hand industry.	Masons and builders.	General labour, unskilled.
	A. P.	A. P.	A. P.	A. P.	A. P.	A. P.
1909	12 0	16 0	16 0	4 0	16 0	5 0 to 7 0
1912	14 0 to 18 0	16 0	16 0 to 20 0	6 0	16 0 to 20 0	5 6 to 8 0

The lower rates for general labour (unskilled) are generally paid in cotton mills and the higher rates in workshops, where the work is heavy.

In the district, as distinct from the city, rates are naturally lower; the most common rates are 6 annas per day for general labour (unskilled), 12 to 16 annas per day for carpenters, 12 to 20 annas per day for masons and Rs. 7 to 9 per *mensem* for ploughmen. During the last twenty years wages have more than doubled, the general rates quoted as prevalent 20 years ago being as follows :—Unskilled labourers 2 to 2½ annas per day, black-smith or carpenter 6 annas per day, while ploughmen were usually

given a rupee per *mensem*, together with their food and clothes. The enquiry made in 1912 showed a distinct general rise in wages since 1905, the year in which an exceptionally severe earthquake damaged or destroyed numerous buildings, the triple canal irrigation scheme was undertaken and the doubling of various sections of the North-Western Railway line was commenced. These causes, combined with the migration of labourers and artizans to the new colonies and other centres of commercial and industrial activity, and the growing prosperity of the peasant proprietors in the district, who are endeavouring to replace their old mud huts by masonry buildings, have made extraordinary demands on the supply of labour, both skilled and unskilled. Plague and malaria have also claimed a very large number of victims from the menial classes and it is not surprising that the labour problem is becoming more acute every year.

CHAP. IIB. Rents, &c. Wages.

Village Menials.

In all villages members of the menial and artizan classes are found, who perform certain services for the landowners, and receive in return a certain share of the produce of each harvest. It is impossible to state with accuracy what each of these receives, for the usage varies from village to village, and depends much on the generosity of the individual landlord, on the willingness of the individual menial, and to some extent on the character of the harvest. Where the custom is to give the menials a certain number of sheaves of wheat, or a stated weight of grain, some approach to accuracy is possible, but in other cases the dues are entered in the village record as taking the form of a percentage of the grain harvested. This method of calculation is not one which suggests itself readily to the mind of the peasant, and it is probable that it originated with the subordinate staff employed at the first settlement, and represents a well meant attempt to evade the difficulty by defining the share taken, in terms understood by educated people.

The menials are knownas *kamins* or *sepis*, the customary duty performed being called *sep*. The principal *sepi* is the Chuhra, who is to the cultivator quite indispensable. Agricultural occupations could hardly be carried on at all without the help of the Chuhra, on whom falls a very large share of the irksome part of field labour. The minimum of work which he performs is that of removing the refuse of the dwelling-house, and the dung from the byre, to the owner's dung-hill outside the site. But this is work which the Chuhra women can perform, and but a small wage would be given in return for this. To earn his full wage as a *sepi*, the Chuhra has to help in removing the manure to the fields and scattering it. He is expected to help in all kinds of ordinary field work, such as cutting and bringing in fodder, feeding the cattle, ploughing, and irrigating the land. He is expected also to provide baskets for manure, and for winnowing (*chajj*).

CHAP. II,B. Rents, &c. Village Menials.

The Chuhra is also employed as a farm labourer pure and simple. If so he does no house work, but does whatever field work his one employer requires of him, for he rarely can serve more than one family as a regularly entertained ploughman. Some find it more profitable to give their labour as *bhaiwals*, but in all cases each man's income is directly dependent on his own willingness to run messages and make himself generally useful as a *begari*, and a willing Chuhra with a family to help him can always keep want from the door. But he cannot be said to do much more.

The other *sepis* are the potter, the carpenter, and the blacksmith. The potter thrives best in a village with many wells, and the spread of canal irrigation has driven many of them to work as carriers. He supplies several families with pots for the well (about 80 pots would be required for a well 20 feet deep) and earthen vessels for the house. The carpenter is better off than the potter in that he has always services to perform, whether there are wells in the village or not, and he gets some of the produce on *barani* and *nahri* land as well. His work is to make and repair ploughs and other implements, besides wooden furniture used in the house, such as beds, spinning wheels, churns and stools. He repairs the well wheels when required. But the wood is found for him in all cases, or else he is paid extra for providing it. As has already been remarked above an accurate statement of the payment the menials receive is almost impossible. A very careful investigation was made at the last settlement (1911) into the question, and the results are given in the following quotations from the Assessment Reports of the three tahsils :—

Tarn Taran.

" Careful enquiries made during the course of the current " settlement show that there is a distinct tendency for the customary dues to fall into abeyance. In many villages the owners, " while agreeing that these dues should be entered as formerly in " the village administration paper, stated that they now often find " it necessary owing to the decline in the menial population to " make a special contract, usually involving a cash in addition to " a kind payment, to the servants they employ. Such contracts " are made for a specified term, generally corresponding to the " agricultural year. In the case of land leased on *batai* it is of " course the tenant and not the landlord who is responsible " for these cash payments. But the increasing disposition of all " menials to desert their hereditary calling and to seek an in-" dependent livelihood in a new field of activity has unquestionably " made it more difficult for the cultivator to obtain the necessary " labour and has compelled him to raise the scale of payment for " these servants.

" In nearly all cases the menials are paid out of the heap of " grain on the threshing floor before it is divided between the " landlord and tenant. The traditional shares vary considerably

" from village, to village and the terms in which they are expressed " vary still more; but the results of enquiries made indicate that " the following calculations may fairly be taken as typical of the " whole tahsil :—

" The sweeper receives a payment of 10, 7½ or 5 per cent. of " the total produce according to the nature of the services rendered. " The highest rate is paid to those who are practically whole time " servants of the cultivator and do any work required. 7½ per " cent. is paid to those who plough and winnow the corn, and 5 " per cent. to those who act only as winnowers. The latter, " however, almost invariably receive some additional payment, " for example, when winnowing is in progress the sweeper is " often assisted for part of the day by his wife, who is allowed " to take a small sheaf of the crop. In addition, he keeps any " grain that may remain among the chaff. On the whole, 7½ per " cent. on all cereals crops of both harvests is a fair deduction to " make. For converting the raw sugarcane juice into *gur* the " sweeper is paid 2½ *seers* per maund or 6¼ per cent.

" The smith and carpenter are both paid at the same rate, and " often the work of both is done by one man. The payment generally " takes the form of a lump amount of grain for each working plough, " usually 2 sheaves or *bharis* of each *rabi* cereal, 8 *seers* of rice and " maize, and 5 *seers* of cotton. In addition, the smith receives a " sheaf for each day on which he sharpens the sickles during " the progress of reaping. Roughly, I consider that the com- " bined deduction of these two menials amounts to 4½ per " cent. of all *rabi* grain crops and a slightly smaller proportion of " the *kharíf* cereals. The potter is paid only on well lands, either at " so much per working plough or so much for each well wheel at " work. In either case his share approximates closely to that receiv- " ed by the smith or carpenter.

Amritsar.

" In Amritsar the menial population is denser than in Tarn " Táran as there has been less emigration to the canal colonies, and " consequently the general scale of payments is somewhat lower. " Sweepers are not so generally employed as whole-time servants of " the *zamindars*, and when so employed are usually paid a fixed " amount of grain, varying from 40 to 60 *kacha* maunds per annum, " instead of a percentage of the total yield. Those who merely " winnow the grain are paid 4 per cent. as against 5 per cent. in Tarn " Táran ; similarly the rate of payment for converting the raw " sugarcane juice into *gur* is 2 *seers* per maund or half a *seer* less " than in Tarn Táran. On the valuable *kharif* cereals the allow- " ances are usually given *hoi boi*, that is, they vary according as " the produce is good, bad or indifferent.

" The smith and carpenter both receive so many *bharis* or " sheaves of straw and grain for each working well wheel. The " commonest rate is 12 *bharis* per wheel, and a lump payment of

CHAP. II.B. Rents, &c. Amritsar.

"3 *kacha* maunds of grain is nearly always added. In some villages "payment is made at so much for each plough, but on the whole, "the share of these two menials is approximately the same as in "Tarn Táran.

"On well lands an additional deduction of 2 per cent. should "be made to cover the potter's dues.

"The total deduction will thus be one of 12 per cent. on "*chahi* and 10 per cent. on other soils. I do not think it is neces-"sary to differentiate between the different circles. In the Bet "Bangar, with its large proportion of Jat owners, the scale of "payment is possibly slightly less liberal than elsewhere, and a "few villages close to Amritsar are doubtless affected by the con-"stant demand for unskilled labour in the city, but these varia-"tion are hardly worth taking into account. In neither case would "they amount to more than a very minute fraction of the gross "produce of the circle.

Ajnála.

"Ajnála village menials are almost invariably paid in kind out "of the heap of grain on the threshing floor before its division between "landlord and tenant, the general rate of payment being slightly "higher in this tahsil than in Amritsar. The labour to be consider-"ed is that of the blacksmith, carpenter, potter and sweeper. The "latter receives 5 per cent. for winnowing the grain, and about 4 "or 5 *kacha* maunds per plough for sowing and weeding. His total "payment would be about 7½ or 8 per cent. of the produce. The "blacksmith, carpenter and potter are all paid at the same rate, "usually calculated at so many sheaves of grain for each working "well. The practice of paying by the plough is falling into abey-"ance. The number of sheaves varies from village to village, but "8 per well seems to be about the average. In addition there is "nearly always a lump payment, known as *phakka* of 2 or 3 *kacha* "maunds after the grain has been threshed."

Prices.

A careful enquiry into the current prices of the district was made in 1911 at the commencement of Settlement operations and the subject was fully discussed in the report issued. The following is a quotation from that report :—

"The zamindar in Amritsar disposes of his surplus grain in one of the following ways :—

(a) by sale to a professional carrier who transports it to Amritsar city or some other large market or flour mill. Of such transactions there are, of course, no written accounts, the zamindar and the carrier being both usually illiterate;

(b) by sale in the open market. It makes little difference in this case whether the zamindar disposes of his grain to the purchaser on the threshing floor or himself transports it to the nearest flour mill or market. In the latter case, he obtains a slightly better price, but against this must be set off the cost of carriage and the octroi duty, if any;

(c) by sale on the threshing floor to the *bania* to whom he is indebted. In this case the cost of carriage to the purchaser's home and of octroi (if any) falls on the purchaser.

In the great majority of cases the zamindar sells his grain on the threshing floor to a *sahukar* whose debtor he is. The statistics under this head exhibited in the attached statement are therefore the most important of those collected, and afford the best basis for calculating the commutation prices to be adopted.

"The rates at which the *sahukar* takes the grain are fixed by a custom "which varies greatly throughout the district. Probably the commonest "method is for the leading *sahukars* of a tract to meet and fix the prices on "the days tradition has assigned for this purpose. Thus for *rabi* crops the "traditional day is the Nirjala Ikadashi festival, falling early in June, for "cotton the 15th day of Kattak, and for *toria* the last day of Magh. In "most of the Ajnála and part of the Tarn Táran tahsíl the lowest market "rate prevalent in Amritsar during the months in which the grain is sold is "accepted as the basis of all transactions, the rates being reported by the "Kumhar carriers. In Jandiala the rates are fixed at a meeting of the lead-"ing *sahukars* and *zamindars* but this is exceptional.

"Another reason for considering that the statistics of these sales are the "best material available for fixing the commutation prices is that they are as "a rule absolutely free contracts. In a large part of this rich district the "agriculturist has other resources besides his land and is seldom so deeply "in debt as to be forced to accept the price offered. It is quite common for "a well-to do *zamindar* to refuse to accept the *sahukar's* rate. In this case "he either holds his grain up till a better price is offered or else takes it "himself to the nearest market and subsequently pays his creditor in cash. "This is of course less true of the poorer part of the Ajnála tahsil beyond "the Sakki, but even here it has been found that the prevalent rates are "usually at most but one anna per maund lower than those of the richer Cis-"Sakki tract of the same tahsíl. In Ajnàla as a whole the average rate for "wheat was continuously higher than in the other two tahsíls from 1892 to "1895, and was again higher in 1898-99 and 1902-03. But it must be "remembered that the creditor purchases his debtor's grain on the thresh-"ing floor, when it has been winnowed but not cleaned, and he makes as a "rule no deduction for dirt or inferior quality, unless the inferiority is very "marked. Moreover, the purchaser has to bear the cost of transport to his "home and possibly of octroi. In sales in the open market the grain is usu-"ally cleaned grain of good quality and is delivered at the purchaser's door; "so it naturally commands a higher price."

The following statement is taken from Statement III of the Report referred to above:—

Years.	Prices in annas per maund for								Tahsíl.
	Wheat.	Barley.	Gram.	Toria.	Rice.	Maize.	Gur.	Cotton.	
Average of 4 years 1906-07 to 1910-11 omitting 1907-08.	42	...	31	55	33	...	70	86	Tarn Táran.
	39	24	29	50	34	35	56	76	Ajnála.
	39	26	30	44	32	36	55	90	Amritsar.
Average of 16 years 1892-93 to 1910-11 omitting 1896-97, 1899-1900 and 1907-08.	33	23	26	42	27	...	57	73	Tarn Táran.
	32	21	27	42	28	31	53	71	Ajnála.
	32	25	25	38	26	25	49	70	Amritsar.

CHAP. II, B.
Rents, &c.
Material condition of the people.

The standard of comfort has risen considerably of recent years. Some years ago the ordinary cultivator was content to wear clothes made of unbleached cotton woven by the village weavers, but he now almost invariably wears one or more garments of machine-made fabric. Well-to-do *zamindars* wear thick woollen coats in the winter and have replaced the common double folded cotton wraps by woollen *lois* (blankets). Ornaments, such as are worn by the women of the district and were generally made of silver, are now made of gold in large quantities. Steel trunks, brass lamps and enamelled vessels are now found in almost every house, and in the richer *zamindars* houses are tables, chairs and even clocks and gramophones. But, though better furnished, there has not been much improvement in the sanitation and ventilation of the houses. Taking the district as a whole the advance in the standard of living has hardly kept pace with the advance in the wealth of the people, which is much greater than is indicated by their dress, houses and house-hold furniture. The amount of income which the Amritsar Jat obtains from extraneous sources unconnected with the land much exceeds he total demands made by Government. Many hold squares in the Chenab and Jhelum colonies and large sums are remitted to the district by men who have taken service in the Army, the Burma police, in Hong-Kong or other colonies. Their wealth would be greater than it is, if they were more thrifty and knew how best to invest the sums at their disposal. A portion of their savings is always invested in land, but a very large part is squandered in drinking, litigation, marriages and other festive occasions.

The position of a clerk is different from that of the cultivator, as he is generally employed in large towns and partly from necessity, partly from a desire to emulate his superiors, he pays more attention to dress than the ordinary peasant. He always wears a woollen coat in the winter. He cannot always afford to keep a servant to cook for him and consequently has very often to depend for food on meals sold by the ordinary baker in the *bazar*. He rents one or two rooms, which are usually small, ill-ventilated and scantly furnished with a bed, a table and one or two chairs.

A landless day labourer lives in much the same fashion as a cultivator, except that he must perforce forego the more costly garments and must live on the cheaper grains. *Ata* made from wheat seldom forms part of his food, as is the general rule with peasant proprietors.

Section C.—Forests.

Forests.

Material condition of the people.

Government owns two small *rakhs* in the district, which are managed by the Deputy Commissioner. *Rakh* Othian in Ajnála has been leased for twenty years at a rent of Rs. 108 per annum, while *rakh* Dinewal in Tarn Táran is leased yearly, the last lease being at the rate of Rs. 150 per annum. Four *rakhs* are under the care of the Forest Department; these are Gagrewál (533 acres), Sarai Amanat Khan (1,441 acres), Bahorú (589 acres) and Nag (456 acres). The first stands overlooking the Beas, where the crest of the Dhaiá is much cut up into ravines. It was intended to provide fuel for the railway originally, and grows the trees locally known as *jand*, *phulá*, *reru* and *kíkar*, but the last named predominates. The second is a long straggling plantation in the north of the Tarn Táran tahsíl and is canal irrigated. The soil is very stiff clay and mixed with *kalar*; a good deal of the *rakh* has been granted out in proprietary right to deserving public servants, and is under cultivation. The remainder is under timber, the *kíkar* being the best suited to the stiff saline soil. The cattle of the neighbouring villages graze in it at certain seasons, sometimes with, and sometimes without, the permission of the officials. *Shisham* trees are not yet much grown in *rakh* Bahorú, no part of which is under cultivation, but the most of the trees, which are all of a small size, are of the kinds mentioned as growing in Gagrewál. Bahorú stands near the main canal within six miles of Amritsar. It is not canal irrigated but a minor drainage line passes through it. *Rakh* Nág is near Majitha, eight miles from head-quarters, and is thickly planted with *shisham* and other trees, being good soil and irrigable from the canal.

Section D.—Mines and Mineral resources.

Mines and mineral resources

There are no mines and few mineral resources in the district; of the latter *kankar*, which is used for metalling roads and for the production of lime, is the principal product. Saltpetre is made in a few villages still, but its manufacture is fast dying out. The last Census Report showed a total of only 1,133 persons, workers and dependents, engaged in quarrying and only 607 persons engaged in the extraction of saltpetre, alum and other substances soluble in water. An account of the location of the various *kankar* beds has already been given in Chapter I.

Section E.—Arts and Manufactures.

CHAP. II E.

Arts and Manufactures.

The manufactures for which Amritsar is most famous are those of *pashmina*, silk and carpets.

Pashmina.

Pashm is the vernacular name for the fine wool of a breed of goats found in and beyond the Himalayas, and the word *pashmina* is used in speaking of any fabric made from that wool. *Pashm* is imported from Thibet *via* Simla, the Kulu valley, or Pathankot, and to a less extent from Kashmir. The wool is brought down in its natural state to Amritsar, where it is cleaned, carded, sorted out, and sold to the manufacturers and master-weavers. The weavers are mostly Kashmiris, but there are also some Punjabi Muhammadans among them, and the work is done in the weaver's own homes, there being no organized factory in existence. The manufacture, which requires the utmost skill and delicacy of manipulation, is learned by the workmen from the earliest childhood. Children are apprenticed to master-weavers, who after a time pay for their services, but usually to their relatives. The pay ranges from Rs. 8 to Rs. 20 *per mensem* and a large advance is generally given to the workmen on first taking service. This custom of advances is a very disadvantageous one to the employer, as he has little hope of redress against an employee who abandons his service before the advance has been worked off.

The most valuable kinds of *pashmina* are those which are made of fine *pashm*, without the admixture of inferior wool, such as that which is imported from the province of Kirmán in Afghánistán. The best manufacturers do not use this Kirmáni wool at all but cheaper fabrics are often adulterated with it, and this among other reasons has caused the decay of the industry, which has been steadily going down-hill for the last thirty years. The fabrics are either plain self-coloured cloth, known as *alwán*, *malida*, &c., either white, blue, smoke-coloured or red ; these are made up into lengths or *táns*, and are cut up as required or else are embroidered into a variety of patterns with silk. Or it may be woven into shawls, plain or embroidered, some of which are known as Rámpur *chádars*, the thread being previously dyed and wound off for the purpose. The shawls in which the pattern is produced in the loom are the most valuable : in others the pattern is produced on a ground-work of plain coloured *pashmína*, by embroidery with the needle and fine *pashm* thread ; such shawls are called *amlikár*, as opposed to the *kánikár* or loom-woven

The inferiority of shawls made in Amritsar to those imported from Kashmir has frequently been noticed, and is variously attributed to the air and climate of Kashmir, and to the quality of the water used in dyeing, &c. But the chief cause of the superiority of the Kashmír work is that the adulteration of the shawl wool with that of Kirmán is never practised. It is believed

that its importation into Kashmír is forbidden. Another reason is that, in Kashmír, the separation of the coarse hair from the finer under-wool, and the spinning, is much more carefully performed. CHAP. II E. Arts and Manufactures.

Pashmina.

But the industry has long been on the wane, and shows no signs of recovery. It was first introduced about 100 years ago, when Ranjít Singh was beginning to extend his rule in the Punjab. In a short time, there were about 300 looms (known as *dukáns*) at work, and shawls, &c., to the value of about Rs. 30,000 were yearly manufactured in the city, besides what was imported from Kashmir, and other parts of the Hills. Part of this was sold in Amritsar and the remainder was exported to Haidarábád in the Deccan, Lucknow, Delhi, and the Native States of Rájpútána. Then, in consequence of one of the periodical famines in Kashmír, there was about 80 years ago a large influx of skilled Kashmíri weavers into the city, which gave a decided impulse to the trade.

Export of Indian shawls began about 20 years later and it is said that when the trade was most flourishing there were as many as 4,000 looms at work in Amritsar, turning out work which, with what was imported, is estimated to have been of the total value of about ten lakhs of rupees. European exporting firms had their agents in the city, and the trade was the principal one of the district. But the fashion changed, adulteration began, and the trade has now been dwindling for many years. The wearing of shawls was given up in Paris, and the rest of Europe followed the lead of that city. The market is confined to Hindústán, especially Lucknow and Haidarábád.

The pure woollen shawl is now being replaced by a cheaper quality, known locally as "*rafal*," which is imported direct to Amritsar from Germany. A course kind of embroidery is worked on these shawls locally, the finer work being done in Kashmir. From 60 to 70 per cent. of the present outturn of shawls is said to consist of "*rafals*." There are no regular factories, as the embroidery is done in the workers, own homes ; there is hardly a house of the poorer classes, both Hindu and Mohammedan, in Amritsar City where this work is not done.

Silk.

The manufacture of silk piece-goods is still carried on to a certain extent. The wearing of silk has become much more general among all classes of natives with the increase in wealth and rise in the standard of comfort. Raw silk used to be imported from Bokhára, and dyed in Amritsar. It was then exported to different places in India, or else woven up into fabrics known by various names. Plain silks are known as *daryái*, striped fabrics as *gulbadan*, and shot silks, or self colours varied with a cross thread of another colour (*dhúp chán*) are coming much into favour. But the import from Bokhára is now very small, a brisk trade in China silk has

CHAP. II, E. Arts and Manufactures. Silk.

sprung up, and the silk used and made up in Amritsar now chiefly comes from Shanghai, *viá* Bombay, Calcutta and Karáchi. There was a time when silk was worn only by nobles and courtiers, but a demand for less costly fabrics has sprung up, and silk can now be sold in almost any of the large cities of Hindústán to all classes of the community. The raw silk is dyed and woven into lengths suitable for making clothes and is sold locally in addition to being exported. But this trade too has suffered from foreign competition and the general tendency to prefer a cheaper to a better quality fabric. Half the total quantity of silk lengths sold in the city are now imported from Japan and France.

Carpets.

Carpet weaving has always been carried on to some extent in Amritsar, but only began to assume importance as an industry about the time when the trade in *pashmína* began to decline. Many *pashm* weavers, thrown out of employment, took to carpet weaving and were glad to work for a small wage. The industry is mainly in the hands of wealthy Hindus, who employ Muhammadan weavers working on the contract system, but it has declined very largely of late years owing to changes of fashion in New York and London, with which cities the largest trade is done. The tendency to prefer a cheaper and less durable article has here again had an appreciable effect on the trade. One firm, which a few years ago had 150 looms working at full pressure, now has only 40 looms at work and has some difficulty in keeping even this small number going.

Factories.

Table 28 gives a list of the registered factories of the district with the average daily number of operatives employed. They are practically all cotton-ginning, rice or flour mills, the largest of all being Sant Ram, Tirath Ram's factory. The Amritsar Cotton Mills Company owns the only factory engaged in cotton-spinning. Expensive machinery was imported in 1889 under an arrangement with Government by a private European firm for the compressing of *bhusa* mixed with grain into cubes for cattle fodder. The works have now been purchased and are carried on by Government.

Amritsar Distillery.

The Amritsar Distillery is situated outside the city close to the Mahan Singh Gate and to the Rám Talái. It was founded by Messrs. A. E. and E. J. R. Dyer in 1898. At that time Government were dissatisfied with the Sadr distillery system and its results and were anxious to get some reputable capitalist to establish a distillery on better principles. Up till that date a collection of extremely ancient small pot-stills, owned by many individuals, made up a Sadr distillery. Messrs. Dyer came forward and established the present Amritsar Distillery, which has during recent years supplied the bulk of the spirit distilled and consumed in the Punjab.

Mr. A. E. Dyer died in 1903 and Mr. E. J. R. Dyer in January 1911. Since the latter date owing to legal questions connected with the estate of the late Mr. E. J. R. Dyer the distillery as part of the estate has been in the hands of the Administrator-General of Bengal. There is a resident European manager in charge.

The following summary of the annual amounts of still-head duty paid, with the rate per London-proof gallon, will perhaps best illustrate the progress made by the distillery since its foundation :—

Statement showing the amount of still-head duty paid by the Amritsar Distillery Company since 1st April 1898 up to 25th February 1914.

Year.	Amount of duty paid.	Rate of Duty per L. P. gallon Plain spirit.	Remarks.
	Rs. a. p.		
1st April 1898 to 31st March 1899 ...	1,66,094 0 0	Rs. 4	
1st " 1899 " 31st " 1900 ...	1,93,832 0 0	" 4	
1st " 1900 " 31st " 1901 ...	2,17,829 10 0	" 4	
1st " 1901 " 31st " 1902 ...	2,73,383 3 1	" 4	
1st " 1902 " 31st " 1903 ...	2,50,452 4 9	" 4	
1st " 1903 " 31st " 1904 ...	3,09,270 11 9	" 4	
1st " 1904 " 31st " 1905 ...	5,18,727 10 11	" 4	
1st " 1905 " 31st " 1906 ...	7,11,966 6 0	" 4	
1st " 1906 " 31st " 1907 ...	7,77,119 5 11	" 4	
1st " 1907 " 31st " 1908 ...	8,67,628 2 5	" 4	
1st " 1908 " 31st " 1909 ...	7,92,689 14 0	" 4 & 7	Foreign.
1st " 1909 " 31st " 1910 ...	10,23,703 13 0	" 5 & 7	"
1st " 1910 " 31st " 1911 ...	12,19,009 0 6	" 5 & 9-6	"
1st " 1911 " 31st " 1912 ...	12,01,395 0 9	" 5 & 9-6	"
1st " 1912 " 31st " 1913 ...	13,67,901 4 9	" 5 & 9-6	"
1st " 1913 " 25th Feby. 1914 ...	12,11,185 4 0*	" 5 & 9-6	"
Total ...	1,11,02,187 11 10		

* Will probably exceed 14 lakhs by the end of the year.

CHAP. II.E.

Arts and Manufactures.

Minor industries.

A small manufacture of acids and chemicals, such as sulphate of copper (*nila thothiya*) is carried on. Soap is made to a fairly large extent and is exported to Kangra and the north. Gold and silver thread, ribbon, spangles, etc. for embroidery are manufactured under the names of *ghota kinari*, *sulma* and *kalabatu* from silver bars imported through Bombay, the gold lace being gilt This work is done by people of various castes in their own homes. Ivory carving is practised with considerable success, but is chiefly confined to combs, paper-knives, card-cases and toys; though inferior to the work of China and of other parts of India, the design and execution, considering the very rude tools employed, are far from despicable. Brass and copper sheets are imported to some extent for the manufacture of utensils for local use.

Mr. Lockwood Kipling, late Principal of the Lahore School of Art, kindly furnished for a previous edition of the Gazetteer the following note on some of the special industries of the district. It is reproduced here unchanged, as it is still in almost all respects an accurate description, and Mr. Kipling had a unique knowledge of the subject: —

Architecture and decoration.

" It has been remarked in the notice of the history of this district that " the Sikh temple buildings are small, not of a high order of architecture, and " are overlaid with a plating of gilt copper and beautifully decorated intern- " ally. A close examination shows that, while the Sikhs displayed no great " originality in their architecture and were content to borrow the inspiration " as well as frequently to plunder the actual materials of Musalmán build- " ings, they had made some progress towards the development of a style of " art which might have presented some interesting features. There is more " in fact in the Sikh treatment of Muhammadan architecture than strikes an " ordinary eye; for like the Jain adaptations of similar elements, it promised " to lead through a natural sequence of growth to new and probably attractive " forms. Mr. Fergusson says of the Amritsar golden temple or Darbár " Sahib that 'it is useful as exemplifying one of the forms which Hindu " temple architecture assumed in the 19th century and where for the pre- " sent we must leave it. The Jains and Hindús may yet do great things in " it, if they can escape the influence of European imitation; but now that " the sovereignty has passed from the Sikhs, we cannot expect their priests " or people to indulge in a magnificence their religion does not countenace " or encourage.'

" Very few religions officially countenance or encourage magnificence; " they usually, indeed, begin by denouncing it; but as their professors grow " rich and prosperous they almost invariably lapse into decorative pomp. " Not only is the upper storey of the Darbár Sahib sheathed in plates of " richly embossed and heavily gilded beaten work in copper, but the lower " storey is encased in a panelling or wainscot of slabs of marble inlaid with " cornelian, mother-of-pearl, serpentine, lapis-lazuli, and other stones resem- " bling in technique the work on the Agra Mumtaz Mahal, but marked by " some notable differences of artistic treatment. The Sikhs are really as " fond of decoration as other Hindús, and they continue to spend large sums " of money on beautifying their temple. Wealthy members of other castes " are permitted (and find it good policy) to present contributions in the form

CHAP. II.E

Arts and Manufactures.

Architecture and decoration.

"of inlaid marble slabs or copper plates with which parts of the interior "formerly painted in fresco merely, are now being covered. The spirit of "catholicity and tolerance which practically obtains in the matter of "religious benefactions might surprise those who are accustomed to look "on the caste system as absolutely and in all respects shutting off each "division from the rest.

"The general supervision of the temple is in the hands of a leading "elder, at present, (1884), Rai Kalyán Singh, [now, Bhái Gurbakhsh Singh, "son of Bhai Parduman Singh,—Ed.] under whom is a large staff of servitors, "including certain craftsmen. Attached to the foundation is a workshop "where marble masonry is constantly being wrought for the repair of the "shrine. The workmen are Sikhs, and they have the peculiarly leisurely way "of addressing themselves to labour which everywhere distinguishes those who "take the daily wage of a wealthy corporation. The great difference be-"tween their work and the similar *pietra dura* of Agra lies in the introduc-"tion of living forms, as fishes, birds, and animals; sometimes the figure of "a devotee, to whose beard is cleverly given a naturalistic air by its being "formed of a piece of veined agate, is introduced. The designs, too, though "over suave and flowing in line like all modern Indian work, are less Italian "in character than those of Agra, and are marked by that local character of "all Sikh ornament, which is much easier to recognise than to describe. "It is notable that no attempt has been made to apply the marble inlay to "the modern drawing-room uses by which alone the Agra inlayers of to-day "manage to pick up a living. No card-trays with jasper butterflies or "inkstands with wreaths of vine foliage are offered to the public in "Amritsar; and the existence of the industry is unknown to many of the "residents.

Work in metals.

"The embossed copper work is wrought independently of the temple "by *chhateras* or chasers who, like others of their craft, also work in silver "on occasion. The doors of the central building in which the Adi Granth "is kept during the day are sheathed in silver, and are good specimens of "this interesting and beautiful art.

"The Sikhs have a tradition that, at the consultations held before beg-"inning the golden temple, it was proposed to make the building gorgeous "with pearls, jewels and gold, but that for fear of robbery plates of gilded "metal and slabs of inlaid marble were eventually adopted. The metal "plates were evidently suggested by the temples of Benares, to one of "which, that of Bisheshwár, Maharaja Ranjit Singh contributed gilded "coverings for the domes. The temple at Patna, the birthplace of Guru "Gobind Singh, it may be noted, was in great part built by his liberality "and it is kept in repair by Punjab Sikhs to this day."

"The beaten metal work is relatively cheap, a large copper panel about "2 feet 6 inches square, covered with foliage in relief of excellent execution, "costing Rs. 24. It is obvious there are many decorative purposes to "which, if our public and private buildings were not so painfully poverty, "stricken, this art could be applied. Recently a copy of one side of the "large door leading from the Akhalbunga to the temple has been executed "for the South Kensington Museum. The side that is turned to the wall, "however, is even more interesting than that selected for reproduction, be-"ing a very curious and admirable piece of ivory inlay. Very few of the "visitors to the temple are aware of the existence of this inlay, and it is "possibly owing to the accident of this being usually turned to the wall and "out of sight, that ivory inlay does not form one of the artistic industries so "curiously kept alive by Sikh piety. Fresco painting also forms part of the decoration of the interior of the temple, and it seems to be restored more

CHAP. II.E. — Arts and Manufactures.

"frequently than is necessary. The work of to-day is inferior as decoration "to that originally wrought. Flowers, especially roses, are treated in a "naturalistic manner, and crowded masses of detail in painfully brilliant "colours replace the simpler and more ornamental forms of early work."

Wood-carving.

"The city of Amritsar contains some good specimens of architectural "woodcarving; and, although there cannot be said to be a large trade, the "carvers and carpenters of the town turn out some excellent work. The "town is claimed indeed by the craft as the headquarters of the wood-car-"ver's art in the Province. Whether this is true may be questioned; but it "is certain that some of the best pieces, such as carved doors, &c., contribu-"ted to the Punjab Exhibition, 1881-82, came from Amritsar.

Metal-wares.

"Brass-ware is wrought in considerable quantities and exported. There "are two distinct schools of metal work in the city, one producing the usual "brass and copper-ware of the plains, and the other the tinned and chased "copper peculiar to Kashmír, which is made for the use of the large "colony of Kashmíris by their compatriots. Of the first there is not "much to be said.

"Brass casting is well done, but the work is not ornamented to such an "extent as at Rewári or Jagádhri. A few grotesque figures and objects "used in Hindu worship are produced but they are, like all Punjab figure "work in metal, much inferior to that of southern India.

"The type of the Kashmír work is a large copper samovar with a "perforated base admitting air to a charcoal stove which occupies the "centre of the vessel. This form is of course an importation. Salvers or "*thalis* are also made in copper which is tinned and enriched by concentric "bands of ornament cut through the tin into the copper ground. When "new, the effect of the red lines on the dull white ground is not unpleas-"ing.

Ornaments.

"Zinc ornaments for use by the poorest classes are rudely cast, and in "some streets the whole of the moulder's operations are carried on in the open "air. It is noticeable that the patterns are inferior to those made in Central "India and in parts of the Bombay Presidency, where this cheap material is "largely used, and where flexible chains with interwoven links are cast at "one operation.

"Large quantities of mock jewelry are turned out. Brass, coloured "glass, mock pearls, tinsel and gilt wire with coloured beads are the raw "material, which is combined with surprising skill. These articles are sold "at fairs and also in large numbers in the *bazárs* of all towns, and consider-"ing their gorgeous appearance when new they may fairly be considered "cheap.

"At Jandiála, in this district, brass-ware is made for exportation, and "the town also has a name for *ekka* wheels.

Ivory.

"The ivory carving of Amritsar probably began with the comb trade. "Combs are necessary to Sikhs and form a permanent portion of their attire. "Box wood is used in large quantities, and cheaper woods are also employed; "but the best comb is made of ivory, decorated with geometric patterns in "open work like delicate ivory lace. Paper knives, and the long parting "comb of the European toilet are also made. Occasionally sets of chess-"men and similar small articles are carved, but they are comparatively "rare.

CHAP II, F.

Commerce and Trade.

Iron.

" The blacksmith's craft, generally backward, is not much more advanc-" ed here than elsewhere. The *dol*, a bowl-shaped bucket resembling those " attached to mediæval wells in France, is neatly made in rivetted sheet " iron in some numbers, and it is curious that notwithstanding the very " cheap rate at which English nails are imported, it should still pay the local " smith to make large quantities of nails. The fact is European ingenuity " is directed towards making the nail as unobtrusive as possible, while the " native carpenter prefers to show it. A long and slender nail with a large " clout head is his favourite form and it is driven without mercy through " the most delicate carving. Most native doors and windows are disfigured " by this nail head, which stains the surrounding surface, and tells among " the carving as a large black blot. Hill iron was formerly much used, and " it is still spoken of as Suket Mandi iron. It is preferred for its softness " and malleability by some smiths, but English iron is driving it out of " the market."

Section F.—Commerce and Trade.

Amritsar has always held the highest position of any town or city in the Province as an *entrepot* of trade. The connections of its merchants are not confined to Hindustan, but extend to Kabul, Kashmir and Bokhara and are of old standing, long anterior to the advent of the British Government in the Punjab. Certainly the opening out of railway communication with Peshawar, Bombay and Sind has done much to increase the through trade, if it has not added enormously to the import of commodities for local consumption. The table on page 114, which shows the inwards " to pay " traffic of Amritsar Station for the year 1911-12, gives a comprehensive idea of the extent and nature of the imports of the district as a whole, for, though Jandiála has some pretensions to commercial importance and minor *bazars* exist in Majítha, Tarn Táran, Vairowál, Rámdás, Atári, Chamiári, Raja Sansi and Vanieke, their trade is purely in local commodities and is quite dwarfed by that of the city, which draws nearly all the trade of the district to itself.

Octroi returns for the city.

More accurate statistics of the trade of the city and district are not available. The figures for inward railway traffic and the table on the next page showing the increase of the city octroi duty since annexation, indicate to some degree the extent of commerce, though the figures relating to octroi are rather misleading as many important staples, such as cotton piece-goods, cotton yarn, raw silk, gold and silver, skins and tea, are exempt from octroi.

CHAP. II, F.
Commerce and Trade.

Inwards "To Pay" Traffic Amritsar Station, North-Western Railway. Summary 1911 *and* 1912.

Goods.	1911.		1912.		Average rates local 1912.
	Weight.	Money.	Weight.	Money.	
	Mds.	Rs.	Mds.	Rs.	Rs. a. p.
1. Coal	5,28,627	1,74,438	6,41,162	2,20,802	0 5 5
2. Cotton	48,024	20,065	67,228	43,057	0 8 10
3. Grain and Seeds (general).	8,83,218	1,31,372	8,43,389	1,28,425	0 2 5
4. Firewood	3,74,154	42,683	3,99,572	39,519	0 1 8½
5. Hides and Skins ...	2,27,815	91,850	2,60,480	1,03,115	0 6 7
6. Jaggery and Molasses	1,36,760	36,473	1,69,357	68,172	0 5 5
7. Kerosine Oil ...	40,040	33,735	36,833	31,305	0 13 6
8. Metal	1,74,840	1,15,757	1,69,075	1,01,915	0 5 5
9. Piece-Goods	3,77,426	4,70,291	4,57,950	5,33,626	1 3 2½
10. Rice and Paddy ...	5,31,550	55,882	5,62,233	58,464	0 1 8
11. Salt	94,299	19,573	85,070	17,291	0 3 3·6
12. Stone and Lime ...	1,93,645	30,479	2,02,605	18,236	0 1 11
13. Sugar	2,11,044	1,71,777	2,24,418	1,69,681	0 12 6½
14. Railway Material ...	1,44,840	Free	1,44,979	Free	Free
15. Wheat	18,437	2,082	29,084	8,463	0 3 6½
16. Miscellaneous ...	15,69,614	5,17,948	20,06,496	6,52,158	0 5 3
17. Animals	...	...	...	...	3 8 0 each
Total ...	55,54,333	19,14,405	62,99,931	21,94,229	
Foreign ...	12,92,339	12,58,928	...	...	

Table showing increase in octroi duty since annexation.

Year.	Percentage of duty.	Amount realized.	Year.	Percentage of duty.	Amount realized.
		Rs.			Rs.
1883-84	Various ...	2,61,124	1898-99	Various ...	3,26,612
1884-85	Do. ...	2,46,170	1899-00	Do. ...	3,41,187
1885-86	Do. ...	2,27,852	1900-01	Do. ...	3,52,772
1886-87	Do. ...	2,24,658	1901-02	Do. ...	3,99,064
1887-88	Do. ..	2,21,478	1902-03	Do. ...	3,46,935
1888-89	Do. ...	2,38,499	1903-04	Do. ...	3,94,299
1889-90	Do. ...	2,53,726	1904-05	Do. ...	4,33,795
1890-91	Do. ...	2,33,687	1905-06	Do. ...	4,44,260
1891-92	Do. ...	2,91,682	1906-07	Do. ...	4,74,805
1892-93	Do. ...	2,73,402	1907-08	Do. ..	5,00,992
1893-94	Do. ...	3,01,026	1908-09	Do. ...	4,29,043
1894-95	Do. ...	2,97,848	1909-10	Do. ...	4,43,087
1895-96	Do ...	3,20,054	1910-11	Do. ...	5,38,948
1896-97	Do. ...	2,85,013	1911-12	Do. ...	5,59,868
1897-98	Do. ..	3,08,689	1912-13	Do. ...	5,82,402

CHAP. II, F.
Commerce and Trade.

Principal articles imported.

The principal articles of *import* are :—

Grain, pulses, sugar, oil, for local consumption and re-export to Ferozepore, Multan, Sukkur, and Karáchi.

Salt from Pind Dádan Khan (the local mart for the Salt Range mines).

Tobacco from the Punjab and United Provinces, for local consumption and re-export to the hills.

Cotton, raw, and manufactured in the country, for local consumption and re-export.

English piece-goods and thread, from Calcutta and Bombay, for the local market, and export to Kashmír, Pesháwar and the North-West Frontier.

Pashmína-goods, shawls, &c., from Kashmír and Núrpur, for export *viâ* Calcutta and Bombay.

Pashm (shawl) wool.—Tibet *viâ* Kashmír and Rámpur on the Sutlej, for local use in manufacture.

Silk, raw and manufactured, from China, *viâ* Calcutta, and Bombay, for re-export and local manufacture.

Broad cloth, from Bombay and Calcutta, for local consumption and re-export.

Blankets, from Dhariwal (Gurdaspur district), Kashmir and Europe, for the local market.

Glass, Earthenware, English Leather, Saddlery, Cutlery and Miscellanies, from Calcutta and Bombay, for the local market, and re-export to the north and north-west.

Metals and Hardware, from Bombay and Calcutta, and hill iron from Suket, &c. Metals also come from the United Provinces.

Tea, from China *viâ* Bombay in small and decreasing quantities : from Kángra, Dehra Dún and Almora direct. Re-exported to Bokhára and Mashad *viâ* Bombay.

Dye Stuffs, Madder, Cochineal, Saffron, Alum, &c., from Multán, Kashmir, and many sorts from Calcutta and Bombay, for local consumption in silk and wool-dyeing, for the manufactories, and for re-export.

Country paper from Siálkot, Lahore, and Kotla.

Drugs and Groceries, from Kábul, Calcutta, Bombay, the hills, &c., for local consumption and re-export.

Horses, from the hills, Rawalpindi, &c., for export, principally eastward.

Camels, from Lahore, Montgomery, &c., for export to the hills, Pesháwar and Jullundur.

Cattle, from Cis-Sutlej, and from Lahore and Montgomery, &c., for export to the hills, Ráwalpindi, Peshawar, &c.

CHAP. II. F.

Commerce and Trade.

Hides and Leather, for the local market and for re-export to Calcutta, Bombay and the hills.

Gold for local manufactures and re-export from Calcutta and Bombay.

Charcoal, firewood, fodder and *tat*, a course gunny cloth, may be also added to the list. Charcoal comes *viâ* Patháukot and from the Bar tracts.

Cotton piece-goods.

The manufacture of country-made cloth was at one time a very promising industry, but it has been almost completely killed by the importation of Manchester piece-goods. Amritsar is the distributing centre in the Punjab of the piece-goods trade, which has developed very rapidly in the last few years mainly owing to the facilities extended by the great exchange banks, such as the National Bank of India and the Chartered Bank of India, Australia and China. Bales of piece-goods are shipped out from England to the banks, who are responsible for their transport from Bombay or Karachi to Amritsar and for their passage through the customs. On arrival the goods are stored in the bank's go-downs, until the trader, who has ordered them, requires them or has collected sufficient money to pay the price of the whole or part of the consignment. The trader with little capital frequently redeems only one bale at a time. The present premises of the National Bank of India, erected at a cost of approximately Rs. 2½ lakhs, include a large double-storied godown, which rarely contains less than £ 100,000 worth of piece-goods, woollens and silk. At the time of writing there has been some excess of activity in the importation of these commodites, and this has necesitated the carrying over of large stocks, thus locking up capital and causing a loss of interest.

Hides and skins.

The hide and skin trade was started about the year 1893 and is of considerable importance. The hides of cattle were first sent to Calcutta and goat skins to Madras, where they were half-tanned and exported to London for sale by auction. There are now about twenty firms principally Indian, though the largest is European, engaged in collecting hides and skins. The Indian firms are owned entirely by Musalman Khojas from Chiniot. The hides are dipped in a solution of arsenic and the skins salted on the firm's premises. They are then shipped, principally from Karachi, to all parts of the world. New York absorbs a large quantity of the trade. There is a side trade in wool and goat hair attached to this business, which is of very considerable value. Tanning is not done on a large scale, but there is a certain amount of primitive tanning, which is very slowly improving in quality. In 1900 a skin could be bought for about 14 annas but to-day the price has risen to about Re. 1-11-0; this rise in price has to some extent decreased the large profits which were at one time made. No difficulty is found in obtaining labour, except during the harvest months, but the rate of daily wages has increased with the advance in the general price of labour.

CHAP. II, F.

Commerce and Trade.

Gold.

The wealth of the district is exemplified by the very large trade in gold bars, which are imported from London *viâ* Bombay. The bars are sold partly for use in the embroidery industry, but chiefly for the manufacture of women's ornaments. Such ornaments were formerly invariably made of silver, but among the fairly well-to-do gold is now commonly used. The prosperous condition of the people is the chief reason for the use of the more expensive metal, but the fact that the price of gold has been practically steady for the last fifteen or twenty years has increased its desirability as an investment for capital. Silver is a metal that fluctuates considerably in price. The total value of the imports of gold bars cannot be accurately ascertained, but it is stated to run to many lakhs of rupees annually. The business is under the control of the Exchange Banks.

Agricultural produce.

The chief products of the district are grain and pulses, sugarcane, cotton, oilseeds, fruits and vegetables. The principal grains are wheat, maize, rice and barley. Wheat in particular is very largely grown. It is not only supplied to the Amritsar market, but is exported by rail from every railway station in the district. The activities of the European firms such as Messrs. Ralli Brothers, Messrs. Sanday Patrick and Co., are too well-known and wide spread over the province to need any description here. The amount available for export to Europe during the current year 1914 will be much below the average owing to the shortage in the United Provinces, to relieve which large stocks of wheat will be exported from Amritsar. Pulses are exported from the Amritsar tahsíl to a less extent, and *jowar* grain is not now sufficiently grown to admit of their being any surplus for export. In fact in many years it has been necessary to import it from the Malwa. The growing of cotton first received a stimulus in consequence of the American war of 1861-62, which sent prices up, and though the export fell of in the following twenty years, it increased again and is still increasing steadily. The growing popularity of this crop has already been noticed in section A of this chapter. The amount grown is now so large that some difficulty is found in finding sufficient money to finance the crop. The oilseeds of the district are *sarson*, *til*, *alsi*, *toria* and *tara míra*. There is a considerable export trade from the Tarn Táran tahsíl, in consequence of the high prices which have been ruling lately.

The table on pages 118 and 119 contain the figures for imports and exports from Amritsar city for the six years ending March 21st, 1912, and were supplied by the Secretary of the Municipal Committee.

Imports into Amritsar City.

Articles.	1906-07.		1907-08.		1908-09.		1909-10.		1910-11.		1911-12.	
	Maunds.	Value in rupees.	Maunds.	Value in rupees.	Maunds.	Value in rupees.	Maunds.	Value in rupees.	Maunds.	Value in rupees.	Maunds.	Value in rupees.
1. Grains of all kinds...	25,15,695	...	25,36,989	...	19,93,408	...	19,85,583	...	24,10,456	...	24,81,415	...
2. Refined Sugar ...	2,64,004	...	2,22,870	...	2,04,976	...	1,81,012	...	1,69,032	...	1,65,479	...
3. Unrefined Sugar ...	1,02,171	...	1,47,648	...	1,19,051	...	1,16,808	...	1,17,737	...	1,62,784	...
4. Ghi	34,479	...	38,460	...	34,943	...	38,167	...	36,454	...	34,294	...
5. Other articles used for food and drink for men including fresh and dry fruits, etc.	9,41,874*a*	...	6,00,480	...	5,10,206	...	5,04,182	...	5,03,825	...	5, 9,740	...
6. Oils	24,876	...	41,181	...	32,550	..	33,507	...	41,617	...	45,184	...
7. Oilseeds	97,700	...	81 299	...	89,451	...	96,394	...	82,009	...	1,06,008	...
8. Other articles for use of lighting and washing.	41,617	...	56,580	...	47,817	...	39,579	...	48,471	...	58,028	...
9. Building materials ...	...	7,21,857	...	7,19,486	...	6,00,971	...	7,57,098	...	7,32,877	...	7,60,158
10. Drugs, gums, spices and perfumes.	...	10,69,730	...	13,85,685	...	12,91,639	...	12,93,341	...	19,86,085	...	19,04,173
11. Tobacco	28,689	...	30,340	...	23,739	...	20,794		27,698	...	33,889	...
12. Cloth, piece-goods, articles (*b*) of clothing and manufactured articles of dress and articles made of leather.	...	34,89,266	..	32,07,000	...	27,51,333	...	27,16,183	...	40,06,278	...	44,30,994
13. Metals and articles of metal.	...	19,40,960	...	24,78,333	...	21,09,333	...	24,24,224	...	24,42,710	...	22,78,012
14. Miscellaneous, *viz.* :— furniture, glass-ware stationery and photographic materials, etc.	...	...	...	...	...	...	...	*c* 91,980	...	2,78,989	...	4,03,993

NOTES.—*a*. Includes articles of food and drink for animals.
b. The figures against this entry do not include the value of cotton piece-goods yarn and raw silk imported as they are exempt from octroi.
c. A new class IX was opened from 1st January 1910.
d. Figures are given in this statement in the columns maunds or value as octroi is assessed on some articles by weight and others *ad valorem*.

Exports from Amritsar City.

Exports from Amritsar City.

Articles.	1906-07.		1907-08.		1908-09.		1909-10.		1910-11.		1911-12.	
	Maunds.	Value in rupees.	Maunds.	Value in rupees.	Maunds.	Value in rupees.	Maunds.	Value in rupees.	Maunds.	Value in rupees.	Maunds.	Value in rupees.
1. Grains of all kinds ...	5,76,301	...	6,74,375	...	1,63,354	...	4,69,449	...	2,10,454	...	5,46,076	...
2. Refined Sugar ...	85,586	...	73,789	...	66,515	...	66,865	...	59,755	...	81,815	...
3. Unrefined Sugar ...	58,672	...	54,293	...	79,509	...	62,086	...	56,132	...	79,762	...
4. Ghi	1,629	...	3,473	...	2,471	...	4,625	...	2,829	...	1,963	...
5. Other articles used for food and drink for men including fresh and dry fruits, etc.	71,187	...	2,44,824	...	2,06,993	...	2,20,616	...	1,74,039	...	2,42,346	...
6. Oils	1,925	...	2,012	...	4,224	...	3,129	...	2,000	...	4,060	...
7. Oilseeds.	22,554	...	10,383	...	17,930	...	27,676	...	19,072	...	27,554	...
8. Other articles for use of lighting and washing.	7,427	...	6,019	...	6,540	...	6,210	...	4,893	...	11,711	...
9. Building materials...	...	22,023	...	30,001	...	20,219	...	22,900	..	33,357	...	37,979
10. Drugs, gums, spices and perfumes.	...	5,05,437	...	5,66,753	...	5,59,535	...	6,36,026	...	7,05,919	...	6,24,030
11. Tobacco	11,747	..	12,681	...	12,387	...	13,737	...	10,494	...	16,299	...
12. Cloth, piece-goods, articles of clothing and manufactured articles of dress and articles made of leather.	...	4,43,602	...	5,69,032	...	3,21,600	...	4,44,672	...	3,72,143	...	4,39,146
13. Metals and articles of metal.	...	3,23,770	...	4,30,993	...	4,02,666	...	4,83,526	...	3,80,997	...	4,42,065
14. Miscellaneous, *viz* :—furniture, glass-ware, stationery and photographic materials, etc.	...	...	...	...	...	...	...	7,751	...	46,011	...	34,979

CHAP. II.G. Communications. Banking.

The collapse of so many banks during the last few months of 1913 was extremely bad for trade and entailed serious consequences to depositors. It has however had some good results. Many of the banks which collapsed had failed to observe even the most elementary principles of banking and had merely attracted deposits by offering impossibly high rates of interests. The sounder banks have reaped the benefit in very largely increased deposits. From what has already been said of the influence of the great banking firms on the trade of the city, it is obvious that the recent elimination of the unsound corporations and the increased power of the sound, will eventually have a wide-spread effect for good on commerce generally, besides providing a salutary lesson to those engaged in risky speculation. Among the banking community the need of a currency office is very much felt, as the Government Treasury is quite unable to supply the cash requirements of so large a business centre. The large increase of the trade of Cawnpore, which followed the transfer of the currency office from Allahabad to that city some ten years ago, is quoted in support of this argument.

Section G.—Communications.

The figures given below show the communications of the district. The river referred to is the Beas, on which rafts of timber and occasionally country boats are seen plying. The Ravi is too low during most of the year to be navigable.

Communications.

Ferries	21	
Navigable river	41	Miles.
Railway	85	"
Metalled roads	123	"
Unmetalled roads	2,907	"

Table 30 shows the distances from place to place as authoritatively fixed by the Local Government.

Ferries.

A list of the ferries on the river Rávi which are controlled by the Amritsar authorities is given herewith :—

Name of Ferry.	Miles from point at which river enters the tahsil.	Number of boats kept up.	Remarks.
Jassar	—3	5	Beyond Amritsar border.
Kassowála	1	4	
Phúlpura	4	2	
Daúd	4	4	
Dalwála	12	10	
Mírowál	14	4	
Bhainián	18	5	
Liddhar	20	8	
Bhindián	24	4	
Vairo	28	2	
Kakar	32	4	

CHAP. II.G. — Communications. — Ferries.

...ch ferry has from 2 to 4 boatmen stationed at it. Some of ...e ferries, such as Daúd and Mírowál, take their names from ...llages in the Silákot district. The leases are sold each year ...parately, or in pairs, to the highest bidder, and the immediate ...ntrolling staff consists of a Darogha and a staff of peons.

A list is subjoined of ferries on the Beás river managed from ...mritsar. These are also leased, except the important one at ...azír Bhullar, which is under direct management :—

Name of Ferry.	Miles from point at which river enters district.	Number of boats.
...zír Bhullar	10	14
...hoki	12	6
...grewál	15	8
...rowál	20	6
...ndwál Miani	24	10
...ndwál Khamba	27	4
...al	29	4
...nda	31	2
...rka	34	4
... ...	40	4

...n these ferries there is a larger staff consisting of a Dárogha, a ...ib-Dárogha and a munshi. At the Wazír Bhullar ferry, which ...on the Grand Trunk Road, there are 5 to 7 boatmen and on each ...the others 3 to 5 men.

Railways.

The North-Western State railway from Lahore enters the ...st side of the district, near Atari in the Tarn Táran tahsíl, and ...ns thence 17 miles to Amritsar, with stations at Atari, Gurusar ...tlani, Khasa and Chheharta. From Amritsar to the bridge over ...e Beas at Wazír Bhullar is 27 miles and there are stations at ...ianwala, Jandiála, Tangra, Butari and Beás (Wazír Bhullar). ...his is the main line from Ambala to Pesháwár. When originally ...nstructed the line was single throughout, steel rails on iron bowl ...epers, with a gauge of 5½ feet, but it is now a double line all ...rough the district. Amritsar is the junction for Pathankot at ...e foot of the hills; this branch-line leaves the district at Jainti...ra, where it enters the Batála tahsíl of Gurdáspur. It runs for ...7 miles in the Amritsar district with stations at Verka, Kathu...ngal and Jaintipura. Another branch runs southward from ...mritsar junction through Tarn Táran, entering the Kasur tahsíl ...Lahore near the town of Patti, a distance of about 26 miles from

CHAP. II. G. Communications. Railways.

Amritsar. There are stations at Bhagtánwála, Sangrána Sahib, Gohlwar Varpal, Dhuknawaran, Tarn Táran, Jandoke and Kairon.

The main line was originally constructed by the Scinde Railway Company with a Government guarantee of 5 per cent. on the capital expended. The first portion laid down was that from Amritsar to Lahore, in 1862, and this was the first section of railway opened in the Punjab. The extension from Amritsar to Delhi was begun in 1864 with the same guarantee, and the whole was taken over in 1870 by the Scinde, Punjab and Delhi Railway Company, which came into existence in that year. Meanwhile the iron girder-bridge over the Beás was constructed, and this proved a work of much difficulty. The floods of 1870 and 1871 damaged the outworks, and in the latter year traffic was entirely stopped. The broken girders were renewed and five extra spans were added, and the bridge was re-opened in 1873, since when no serious damage has occurred. The actual cost of the bridge was close upon twenty-three lakhs of rupees. The doubling of the line necessitated the building of a new bridge, which was opened for traffic in 1909. It is only a few hundred yards above the old bridge, which is now being converted into a road bridge.

The branch from Amritsar to Pathankot was constructed by the Provincial Government in 1883. The original covenant with the Scinde, Punjab, and Delhi Company gave Government the power to buy their railway at the end of 25 years, from the date of commencement of the lease of the land acquired for it. This period expired on the 31st December 1884, whereupon Government in view of the strategical importance of the line, purchased the whole line, and this, including the Pathankot branch, is now worked by the Public Works Department, under the name of the North-Western State Railway. The Amritsar, Tarn Táran and Patti branch was constructed by the North-Western State Railway, being formally opened in 1907.

The Amritsar tahsíl is thus traversed from end to end by the main line and between Amritsar and Jaintipura by the Pathankot branch line, while the Tarn Táran tahsíl is bisected by the Patti branch line, so that these two tahsils possess excellent railway facilities. The Ajnála tahsíl, on the other hand, has no railway facilities at all and, as will be noted later, its road communications are also unsatisfactory. With regard to future developments, the following note is a quotation from the final settlement report of 1914 :—

" Suggestions for further development have from time to time " been made, such as the linking up of Batála on the Pathankot " branch with Beás on the main line, and the opening of a branch " line from Amritsar to Ajnála and thence on through part of the " Batála tahsíl to Siálkot. The bridging of the Ravi is the chief

CHAP. II.G. Communications.

"obstacle to the fulfilment of this latter project, but the former "project presents no engineering difficulties at all. A line from "Batála to Beás would lie throughout in a very rich and densely "populated tract and would be certain to pay a handsome return "on the capital expenditure."

Roads.

The Amritsar and Tarn Táran tahsíls are well supplied with roads, but in Ajnála there is but one metalled road running from Amritsar to Ajnála and thence on to Ramdas. It crosses the Sakki stream by a bridge, which forms the only sure communication between the two parts into which that stream divides the tahsíl. The Grand Trunk road, which is the only road in the district maintained from provincial funds, runs parallel to the main line of the railway across the district from the Lahore border to the Beás bridge, a total distance of some 46 miles.

The District Board maintains a length of 71 miles of metalled and 307 miles of unmetalled road at an average annual cost of Rs. 29,812.

The following table shows the principal roads of the district together with the halting places on them, and the conveniences for travellers to be found at each :—

Route.	Halting place.	Distance in miles.	REMARKS.
Amritsar to Jullundur Grand Trunk Road (metalled).	Jandiála ...	11	Railway station 1½ miles distant, Serai, encamping-ground, police station, rest-house and canal chauki 1½ miles distance. Post Office and Telegraph Office.
...	Raya ...	12	Encamping-ground and canal chauki.
...	Wazir Bhullar	6	Beás Railway station. Public Works Department and Railway Officer's rest-houses. Post Office.
Amritsar to Lahore Grand Trunk Road (metalled).	Gharinda ...	12	Police station encamping-ground and rest-house Gurusar Sutlani railway station, ¾ mile distant.
...	Atári	5	Railway station, Public Works Department rest-house, 1½ miles dis tant on Grand Trunk Road. Post Office.
Amritsar to Ajnála (metalled.)	Rája Sánsi ...	6	Encamping-ground. Post Office
...	Ajnála ...	9	Tahsíl, police station, rest-house, encamping-ground, Serai. Ferry on Rávi 7 miles further on. Post Office.

CHAP. II.G.
Communications.

Route.	Halting place.	Distance in miles.	REMARKS.
Ajnála to Rámdás (metalled).	Rámdás ..	13	Rest-house and Serai. Post Office.
Amritsar to Majítha (metalled).	Majítha ...	12	District board rest-house. Post Office.
Amritsar to Gujránwála.	Chogawan (near Lopoki).	14	Serai, rest-house, encamping-ground, police station. Post Office.
...	Kakkar ferry ...	7	Ferry, rest-house. Post Office.
Amritsar to Fatehgarh	Majjupura ...	12	Canal chauki.
Amritsar to Batála ...	Verka ...	7	Railway station. Post Office.
...	Kathu Nangal...	6	Railway station 1 mile distant, serai, rest house, camping-ground, police station. Post-Office.
...	Jaintipura ...	7	Railway station, canal rest house.
Amritsar to Srihargobindpur.	Mahta	22	Rest-house. Post Office.
Amritsar to Ferozepore	Chabal... ...	13	Encamping-ground, serai and rest-house. Post Office.
Amritsar to Hariki ferry (16 miles metalled).	Tarn Táran ...	16	Tahsíl, camping-ground, police station, rest house. Post Office and Telegraph Office.
...	Sirháli Kalán ...	12	Camping-ground, rest-house, serai. Post Office, police station.
Tarn Táran to Goindwál.	Goindwál ...	15	Ferry. Post Office.
Jandiála to Vairowal	Vairowál	15	Police station and rest-house. Post Office.

CHAP. II, G. Communications.

The old Amritsar-Pathankot road has not been re-metalled for many years and has sunk almost to the status of a *kacha* road. There are good driving roads along the main branches of the canal, but these are closed to ordinary traffic. The district is intersected by many unmetalled roads of which the most important are those from Majítha to Vadala Viram (10 miles), from Gharinda to Tarn Táran, from Atári through Chogawan and Ajnála to Fatehgarh in Gurdáspur, and from Wazir Bhullar to Batála passing through Mahta where there is a District Board rest house. The district bungalows at Ajnála, Taran Táran, Rámdás, Lopoki, Káthunangal, Sirhali, Chabal, Bal, Bhindi Saidan and Kakkar are all furnished and provided with cooking utensils. There is a servant or *chaukidar* in charge of each. A full list of the rest houses of all departments in the district and within a distance of about six miles outside the district boundaries, with particulars as to the accommodation to be found at each, is contained in Table 29 of volume B.

Post offices.

The district is well-supplied with Post offices. Besides the 1st class Head Office at Amritsar, there are 9 sub-offices in various parts of the city and 16 sub-offices in the district. The offices at Ajnála and Tarn Táran are cash offices, the latter being also a combined office. The branch offices number 144. A full list of all offices is given in Table 31. The enormous increase in the number of offices during the past twenty years is shown by the following table:—

	Sub-offices in Amritsar city.	Sub-offices in the district.	Total branch offices.
1893	4	4	25
1913	9	16	144

Telegraphs.

The Departmental telegraph office at headquarters is of the second class. There are six combined post and telegraph offices, of which two, *viz.*, Amritsar Golden Temple and Amritsar Majith Mandi, are of the second class and the remaining four *viz.*, Amritsar Kacheri, Amritsar Town Hall, Jandiála and Tarn Táran, are of the third class. The canal department possesses a telegraph system, which the public are not allowed to use. Telegrams may be sent from all railway stations on the main line and the Gurdáspur-Pathánkot branch, but only from the larger stations on the Amritsar-Patti branch line.

CHAP. II, H.

Famine.

Section H.—Famines.

The scarcity of 1868 and 1869 has already been described in Chapter I. Since then there have been several years of scarcity, such as 1899-1900, 1907-08 when the failure of the rains resulted in a serious shortage in fodder and the price of wheat and the other principal staples rose very high. This is liable to happen in any year, but even in the worst years famine was never proclaimed and is never likely to be so, as the district is so well protected by canal and well irrigation. In fact, Amritsar may be regarded as a district from which large supplies can be exported in case of famine in other parts of India, the relief afforded to the affected districts of the United Provinces in the present year (1913-14) being an example very much in point. The unprotected area of the Ajnála tahsíl, which lies beyond the Sakki *nala*, is the tract most quickly affected by a shortage of the rains and consequently most liable to famine, but despite its isolated position and lack of communications by rail and road, even here no serious famine need be anticipated.

CHAPTER III.—ADMINISTRATIVE.

Section A.—Administrative System and Divisions.

CHAP. III, A.

Administration Divisions.

The Amritsar district is under the control of the Commissioner of the Lahore division, whose headquarters are at Lahore. The ordinary headquarter staff consists of a Deputy Commissioner, who is also District Magistrate and Collector, with seven Assistant or Extra Assistant Commissioners. One of the latter is employed as Revenue Assistant, and one is in charge of Treasury. The others perform criminal, reveuue and miscellaneous executive work under the control of the Deputy Commissioner. An Assistant Commissioner is now regularly appointed as Secretary of the Municipal Committee of Amritsar city. The district contains no sub-divisions, but is divided into three tahsíls, Ajnála, Amritsar and Tarn Táran, each in charge of a Tahsíldár, who ordinarily exercises the criminal powers of a second class magistrate, and on the revenue side those of a second grade Assistant Collector. He is assisted by a Naib-tahsíldár. The village revenue staff working under the district kanungo is of the strength shown below :—

	Office Kanungos.	Field Kanungos.	Patwaris and Assistant Patwaris
Head-quarters	1	...	...
Amritsar tahsíl	1	5	115
Ajnála tahsíl	1	5	99
Tarn Táran tahsíl	1	5	113
Total ...	4	15	327

Honorary Magistrates.

In addition to the officers mentioned above, there are a number of honorary magistrates in the district exercising criminal, civil, and in some cases both criminal and civil jurisdiction. Of these Thakur Mahan Chand and Sardar Bikram Singh have first class powers, both criminal and civil, while Sardar Jiwan Singh has the same powers in criminal suits only, over the whole district. Sardar Bhadur Arur Singh, C. I. E. exercises both criminal and civil powers of the first class in the Amritsar and Tarn Táran tahsíls. Risáldar-Major Sardar Bahadur Budha Singh of Jhalari has second class criminal powers in Amritsar tahsíl. In Ajnála tahsíl Mahant Ragho Das has second class powers, criminal and civil, and in Taran Táran tahsíl Sardar Chain Singh has third class

CHAP. III, A.

Administration Divisions.

criminal and civil powers. Besides these there is a bench of honorary magistrates in Amritsar city itself exercising second class powers under Section 15 Criminal Procedure Code; their names are as follows :—

Honorary Magistrates.

Yusuf Shah, The Hon'ble Khan Bahadur Khwaja.
Dholan Das, Lala.
Ram Saran Das, Lala.
Ghulam Sadik, Khan Bahadur Shaikh.
Feroze-ud-Din, Shaikh.
Sain Das, Lala.
Gulzar Singh, Sardar, Kalianwala.
Rattan Chand, Lala.
Mansa Ram, Lala.
Tilok Chand, Lala.
Sundar Singh, Sardar, Ramgaria.
Jagat Ram, Lala.
Fateh Mohammad, Shaikh.

Zaildars.

Zaildars were first introduced at the revised settlement of 1865 by Mr. Prinsep, Settlement Commissioner. They were paid by an additional cess recovered from the people, which varied from 12 annas per cent. on the revenue of *zail* to Rs. 1-8 per cent. There were originally 41 *zaildars*, but the limits of their *zails* did not correspond with those of *patwari* circles or police stations. The *zaildari* system was carefully reorganised in 1892 when the number was increased to 43 and the boundaries of *zails* were so arranged, that no *zail* fell within the limits of more than one *thana*. The pay was fixed at a uniform rate of one per cent. on the land revenue of the *zail*, except in the Amritsar Khas *zail*, where the incidence of assessment being very high, the full rate would have provided a larger remuneration than was necessary. In that *zail* the rate was accordingly fixed at 12 annas per cent. The remuneration of *zaildars* is now met by a drawback of one per cent. on the total land revenue demand of the district, and is no longer a cess collected in addition. The system of giving each *zaildar* one per cent. of the demand of his *zail* necessarily caused great inequality in the scale of payment. The remuneration varied from Rs. 200 to Rs. 600 per annum, and this caused a considerable amount of dissatisfaction. The land revenue demand of a *zail* is admittedly a very misleading measure of the work a *zaildar* has to do, which depends primarily on the state of crime in the tract. A re-arrangement of boundaries so as to produce approximately equality of payment would have involved enormous trouble and the abandonment of an arrangement that had hitherto worked successfully. A scheme has accordingly been sanctioned with effect from the year 1913-14, under which each *zaildar* will be paid Rs. 350 per annum, but 9 or 10 selected men will be in a special grade and will receive an

CHAP. III. A.

Adminis-trative Divisions.

Zaildars.

additional Rs. 90 per annum. The following table gives a full list of zails, the amount of revenue from each, the present incumbents of the posts of *zaildar* and the prevailing caste or *got* in the *zail* :—

Name of tahsil.	Name of Zail.	Number of estates.	Annual Revenue.	Present Zaildar.	Prevailing tribe or Jat.
AMRITSAR.	Chima Bath	30	41,850	Gurdit Singh ...	Hindu Jats, various.
	Batala	21	34,050	Gopal Singh ...	Hindu Jat, Bal.
	Sheron	17	22,275	Indar Singh ...	Do., Chahil.
	Mahta	22	41,275	Karam Singh ...	Do., Randhawa.
	Mallian	22	44,125	Ram Singh	Do., various.
	Tarsikka	28	42,220	Dial Singh	Jats and Rajputs.
	Fatehpur	24	45,100	Nabi Bakhsh ...	Ditto.
	Jandiala	26	58,350	Chanda Singh ...	Hindu Jat, Hundal.
	Mattewal	38	45,975	Ishar Singh	Hindu Jats, Jhawar.
	Kathu Nangal ...	38	52,550	Tahil Singh... ...	Do., various.
	Tarpai	33	48,575	Muhammad Bakhsh...	Hindu and Muhammadan Jats.
	Majitha	21	54,925	Wadhawa Singh ...	Hindu Jat, Gil.
	Miran Kot	19	37,875	Kishan Singh ...	Do, various.
	Amritsar	11	83,421	Gurbaksh Singh ..	Do., do.
	Gilwali	27	55,225	Pal Singh	Do., do.
	Total ...	377	7,07,771		
TARN TARAN.	Atari	19	27,075	S. B. Harnam Singh, R. M.	Hindu Jat, Sidhu.
	Naushara Dhala ...	18	27,975	Sher Singh	Do., various.
	Bhakna	19	19,675	Resaidar Ajaipal Singh.	Do., Sidhu.
	Dhand	12	35,100	S. Thakar Singh ...	Do., Dhillon.
	Panjwar	24	48,925	S. B. Thakar Singh ..	Do., do.
	Palasaor	27	39,750	Bur Singh	Do., various.
	Padri	34	46,275	Bishan Singh ...	Do., Aulakh and Dhillon.
	Rasulpur	28	29,775	Surain Singh ...	Hindu Jat, various.
	Kang	18	37,525	Jalal-ud-din ...	Do., Kang.
	Naoshera Punnuan...	29	43,450	Sham Singh... ...	Do., Pannuan.
	Sirhali	27	41,975	Kapur Singh ...	Do., Sandhu.
	Raniwala	14	25,400	Partab Singh ...	Do., do.
	Jamarae	16	25,375	Kehr Singh	Do., various.
	Vairowal	26	27,727	Niamat Khán ...	Rajput and Pathan.
	Nagoki	16	31,650	Khushhal Singh ..	Hindu Jat, Sandhu an Khera.
	Jalalabad	29	32,164	Rahim Baksh ...	Muhammadan Jat, various.
	Total ...	356	5,39,816		
AJNALA.	Kamalpur	31	25,866	Ahmad Bakhsh ...	Muhammadan Jat, Valha.
	Sadhar	32	34 375	Harnam Singh ...	Hindu Jat, various.
	Gago Mahl	30	19,079	Jowand Singh ...	Do. and Rajput.
	Ballarhwal	33	17,325	Inayat Ulla Khán ...	Rajput.
	Ajnala	25	27,025	Udham Singh ...	Various.
	Sainsra	22	36,325	Ishar Singh... ...	Hindu Jat, various.
	Raja Sansi	23	41,775	S. Raghbir Singh ...	Do., do.
	Karial	28	26,735	Muhammad Khán ...	Do. and Rajput.
	Kotli Dosandi ...	37	19,889	Darab Khán ...	Rajput.
	Bhilowal .. .	25	25,450	Mathra Das	Hindu Jat and Arain.
	Lopoki	30	38,725	Bela Singh	Do., various.
	Chawinda Kalan ...	26	37,825	Masa Singh	Do., Aulakh.
	Total ...	342	3,50,394		
	GRAND TOTAL ...		15,97,981		

CHAP. III, A.
Administrative Divisions.
Village headmen.

The number of *lambardars* in each tahsil is shown below :—

Tahsil	Number of estates.	NUMBER OF *lambardars*.	
		At last settlement.	Now.
Tarn Taran	356	940	938
Amritsar	377	1,088	1,088
Ajnala	342	811	800
District ...	1,075	2,839	2,826

Under the new assessment, which will amount roughly to Rs. 16 lakhs, village headmen will on an average be responsible for Rs. 930 each, including the canal dues, which are collected by them, and which amount to Rs. 10⅓ lakhs. 15 posts have been reduced since 1893, and 2 new posts have been recently created, one at Rakh Shikargah in Amritsar tahsil, where an estate originally belonging to Government had been disposed of to grantees or capitalists and no headman appointed; and the other at Zanardar in Tarn Taran, where there is a separate *abadi* inhabited by a large number of Christian owners.

Chief headmen.

The following account of chief headmen is quoted from the final settlement report of 1914 :—

" *Ala lambardars* were appointed in all villages at the 1865 " settlement. They were remunerated by a cess of one per cent " on the land revenue over and above the *pachotra* taken by the " ordinary headmen, and in addition a plot of land was set aside in " each village and known as the *ala lambardar's mafi*. The " revenue of these plots was fixed but remitted in favour of the " chief headmen. Subsequently, under the orders contained in " Punjab Government letter No. 31, dated 1st February 1890, these " *mafis* were resumed and in lieu of them cash *inams* of equivalent " value, but not exceeding one per cent of the revenue of the " village, were assigned to *ala lambardars*.

" At last settlement a scheme was sanctioned under which the " office of *ala lambardar* was to be abolished on the death of the " existing incumbent in villages where there were only one or only " two *lambardars*. Where there were more than two *lambardars* " the office of one *ala lambardar* was not to be interfered with " during the term of settlement. The value of the cash *inams* at " that date was Rs. 9,078. Of this sum Rs. 5,127 were to be con- " tinued for the term of settlement, and the balance of Rs. 3,951 was " to be resumed on the death of existing incumbents. It was not, " however, to be credited to Government, but to be utilized for the

CHAP. III, B.

Civil and Criminal Justice.

"creation of *safedposhi inams.* Sixteen years later Punjab Government letter No. 233-S., dated 1st June 1909, sanctioned the gradual abolition of the *ala lambardari* system in all districts where it still obtained. On the extinction of each office, on the death, dismissal or resignation of the existing incumbent the special cess of one per cent. was no longer to be collected and the cash *inam* was to be resumed. Up to the limit of Rs. 3,951 sanctioned in 1893 resumed *inams* were to be devoted to the creation of *safedposhi* grants, but beyond that limit they were to be credited to Government. The effect of these orders up to the present time is shown by the following figures :—

Tahsil.	At last Settlement.		Now.	
	Number of ala lambardars.	Value of inams enjoyed.	Number of ala lambardars.	Value of inams enjoyed.
		Rs.		Rs.
Tarn Taran	351	2,662	188	1,569
Amritsar	395	4,160	221	2,756
Ajnala	388	2,256	160	1,318
District ..	1,134	9,078	569	5,643

Court of Wards.

There is at present only one estate under the management of the Court of Wards. It belongs to the two minor sons of the late Sardar Bahadur Sardar Arjan Singh, C.I.E., of Chahal in Tarn Taran, and the manager is Hakim Singh of Panjwar. The area of the estate is 523 acres with an annual income of Rs. 10,933. The owners enjoy a fixed jagir of Rs. 2,421 per annum.

Officers of other departments.

Amritsar is the head-quarters of the second, third and fourth divisions of the Bari Doab Canal, each of which is in charge of an Executive Engineer. The whole canal is under the control of the Superintending Engineer, whose head-quarters are also at Amritsar. The district lies within the Central Police Range, and administrative control is exercised by the Deputy Inspector-General, whose head-quarters are at Lahore. There is one Assistant Engineer, P. W. D. Roads and Buildings Branch, who is subordinate to the Executive Engineer in Lahore.

Section B.—Civil and Criminal Justice.

The chief judicial officer is the District Judge, who resides at Amritsar and also acts as Sessions Judge for the Amritsar District. The subordinate Judges ordinarily perform civil judicial work only, both original and appellate. There are five Munsifs in the district, of whom three are stationed at head-quarters, one at Tarn Taran and the fifth at Ajnala. Of the three Munsifs

CHAP. III, C.
Land Revenue.

at head-quarters two are sub-judges with jurisdiction over the district and the third exercises jurisdiction in the Amritsar tahsil only. Table 35 gives the principal statistics relating to civil justice, supplied by the District Judge. The most noteworthy points of recent years have been the marked tendency to substitute written contracts for oral agreements in the case of money and moveables, and, secondly, a large decrease in the number of suits for foreclosure or possession by mortgagees. Redemption has been considerably more frequent than foreclosure, and the fact seems to indicate an increase in the material prosperity of the people. Comments on the criminal statistics of the district will be found under Section H. Police and Jails.

The Bar.

There are 14 Barristers-at-Law practising in the Amritsar district, besides 66 Pleaders, of whom rather more than half are of the first grade, and 90 petition-writers. During 1913, thirteen licenses as revenue agents were renewed, five being first grade, and eight second grade.

Registration.

The Deputy Commissioner is *ex-officio* Registrar for the district. Sub-registrars are stationed at the head-quarters of each tahsil; Thakur Mahan Chand is honorary sub-registrar of Amritsar, Sardar Harnam Singh and Sardar Sadhu Singh are departmental sub-registrars at Tarn Táran and Ajnála, respectively. Besides these sub-registrars, the Tahsildar is *ex-officio* joint sub-registrar of his tahsil. The figures relating to registration are in table 37. The revenue collected from this source averages a little more than Rs. 30,000 annually.

Section C.—Land Revenue.

Village communities and tenures.

It is in many cases almost impossible to class a village satisfactorily under any one of the ordinarily recognised tenures; the primary measure of right between the main sub-divisions of the village frequently follows one form, while the interior distribution among the several proprietors of each of these sub-divisions follows another form, which itself often varies from one sub-division to another. At the recent assessment a strong tendency was observed to neglect entirely customary shares and regard only the shares in actual possession when apportioning the revenue demand. The following table shows the number of villages classed under each form of tenure during the recent assessment operations (1911) :—

Tahsil.	Perfect Zamindari.	Communal Zamindari.	Perfect Pattidari.	Imperfect Pattidari.	Perfect Bhaiachara.	Imperfect Bhaiachara.	Total.
Ajnala	3	9	99	107	112	12	342
Amritsar	4	1	3	273	...	96	377
Tarn Taran	4	2	97	75	149	29	356
District ...	11	12	199	455	261	137	1,075

CHAP. III. C.

Land Revenue.

Development of the various forms of tenures.

The following paragraphs are quoted from a report by Mr. E. A. Prinsep, Settlement Commissioner, the officer who conducted the re-assessment operations in Amritsar from 1862 to 1865. They describe clearly the main forms of tenure found in the district and the way in which one form is developed out of another :—

" Generally speaking, the Theory of Tenure may be described as at one time or other coming under one of the following stages :—

" I.—The Partriarchal or Landlord.
" II.—The Communal or Joint stock.
" III.—The Divided, regulated by ancestral shares.
" IV.—The Divided, regulated by customary shares.
" V.—The Accidental, regulated by possession.

" I know of no better way of shewing the transition from one stage to " another, and the causes which produce it, than by giving the following " illustration."

" The founder of a village secures a property by purchase, grant, appro- " priation or conquest. He has a family of six sons, he holds it all himself. " This represents the first period, and corresponds with the pure Landlord " system. "

" At his death the six sons being connected by a strong tie, hold the " property in common ; those sons too prefer to maintain the joint interest in " this form ; land is abundant, revenue is taken in kind, they have no differ- " ences to occasion any necessity for resort to division, so the " Communal " " system is maintained intact, the interest of each brother or shareholder being " regulated by the *laws* of *inheritance.* "

" In course of time population increases, and with it the demand for " land ; dissensions begin. The descendants of one son have been cultivating " less—those of another, more, than the shares which regulate the division of " profits. To prevent future disputes, the estate is divided according to the " *laws* of *inheritance*, and here we come to the third type. "

" As generation succeeds generation, and the country is subject to change " of rule, stress of seasons, and accidents occur, leading to hardship to indivi- " dual co-partners ; or some die off, others leave the village; some get involved " in difficulties, others mortgage their properties ; it can be conceived that " mutations would follow, which would increase the holdings of some, while " others being unable or unwilling to succeed to lapsed shares, additional reason " would appear for not disturbing possession and resorting to the law in times " when little attention was paid to rights and the influential could generally " do as they pleased. In such a state of things it is easy to see how ancestral " shares would die out, and customary shares take their place which would " agree with the land actually held by each co-partner. Villages of this class " would represent the fourth type. "

" Ultimately all resort to shares dies out ; there may have been money " settlement in former days ; poverty may have driven out the old proprietors " who may have been succeeded by cultivators, located by the Kárdars ; " the land may lie near a large town and have become so valuable as to " have utterly changed hands ; or, if still belonging to the old brotherhood, " owing to distress, misrule and a hundred causes they found it their best " interest to make each man's occupancy the rule of his interest in the estate; " or men of different castes may have become owners by original or subsequent " appropriation ; whatever was the cause, there is no trace of any kind of

CHAP. III, C.

Land Revenue.

" shares, the village custom is to throw the liabilities on the total area " cultivated by each person. This takes us into the last stage. Generally it is " to some accident or defect in succession that this tenure may be attributed, " so I have termed it the " Accidental stage. "

" Under the classification usually prescribed the two first would comprise " all tenures held in common, known as " Zamindari " or what is popularly " termed " Shámilát " or " Sánji " in this district. The third and fourth " would take in " Pattidári," whether (perfect) completely divided, or imper- " fect in which the land actually held by the brotherhood was formally " divided, and the rest held in common. In the last I have kept only such " estates as are " Bhaiáchara " or what I understand to be " Bhaiachara, " " *viz.*, where possession is the sole measure of right and responsibilities, and " land is held completely on severalty, whether ever subjected to final division " in previous days or not. "

Extent to which each form of tenure prevails.

Eleven villages are shown in the table as held on a landlord tenure. These are all or nearly all lately formed estates, some of them uncultivated, and recently known as *rakhs.* They have not yet had time to pass to any other stage. Of the twelve estates held on a communal or joint-stock tenure, most are villages in which the owners are certainly recorded as so holding, but in which for convenience of cultivation, they have, pending a permanent partition, agreed to hold and cultivate each a separate portion temporarily. It is only in isolated cases that there would be an amicable division of the whole produce according to ancestral shares. The bulk of the estates are shown as held on a *pattidari* tenure, which must be considered rather as a negative description, and as meaning that the village has not yet reached the stage in which each man's possession is the sole measure of right. It includes many various forms, in which the original shares are becoming more or less obscured and departed from. Cases are now very rare in which the purest form of *pattidari* tenure is met with, *i. e.*, that in which each man's holding closely corresponds with what he is entitled to by inheritance, and in which there is no common land left to partition. At the recent re-assessment a strong tendency was noticed towards making liability follow possession. It was recognized that the days were past in which Courts would decree, or the whole brotherhood consent to, equalization of the land which had come down to the community from a common ancestor. Land has become too valuable and it was hopeless to expect a man to give up a part of his land, even when it was proved that he held more than his share. The most that was conceded by those who held more than their share, was that when the common land came to be divided something should be done in the way of compensating by a larger allotment to those who had failed to retain their full share in the divided land, and even this concession was only agreed to in cases where the relationship between the parties was very close. And if pure *pattidari* is becoming rare, pure *bhaichara* or possession tenure, in which all land has been divided up and both right and liability is governed by possession, is almost equally gaining ground. In very many *bhaiachara* estates there is some land still recorded as held in

common, but the owners generally agree to partition according to the amount of the land revenue paid by them or according to the land possessed by them, the former method being the more common. Near the city, where land is most valuable, the drift towards the *bhaiachara* tenure is most observable, and the city of Amritsar is an instance of pure unadulterated *bhaiachara*, for there the land which is not held in severalty is entered as the property of Government. The taking up of land for roads, railways and canals, has done much towards obliterating shares. Those who had to give up the land received the compensation at the time, and the recollection of this fact leads the rest of the co-sharers to resist any overtures towards equalization. In such cases the only course open is to declare for a *bhaiachara* tenure.

The district has long been under cultivation, and is in an advanced stage, and little clue can now be obtained as to the mode in which the land was originally appropriated and parcelled out by the different communities. The difficulty of tracing this out at the present time is increased by the fact that the reports of early revisions of assessment are either meagre or altogether non-existent. The nature of the processes must be left to conjecture by analogy from observing what has been done and recorded in other more recently peopled tracts. It has been thought sufficient to indicate the stage at which the district has arrived without attempting to pursue the enquiry further back.

Proprietary tenures.

There is little to notice under the head of proprietary tenures. After sixty years of British rule it has come to be recognized that each man has full proprietary right in his holding, and can do what he likes with it, subject only to the provisions of the law of preemption. But the idea is one of foreign growth, and the feeling is still strong that one member of a family has strictly no right to dispose of his holding to the possible detriment of other members. A childless widow has of course only a life interest in her husband's estate, and suits are often brought to restrain a childless proprietor from parting with his property. But land is now freely sold and mortgaged.

Size of proprietary holdings.

Holdings are now becoming very small throughout the district, and the pressure on the land is much felt. The average area of cultivated land to each *malguzar* or co-sharer responsible for the Government revenue is nearly 6½ acres in Amritsar and Tarn Taran, and nearly 4½ acres in Ajnala. But if the area cultivated by occupancy tenants and the area held in mortgage are excluded, the area per *malguzar* in Amritsar and Tarn Taran is only five acres and in Ajnala falls to three acres. It is, however, somewhat dfficult to give by means of an average an idea of the real size of holdings in different parts of the district. In the Aráin villages of Ajnála, and in some of the Ját villages in Amritsar, the holdings are painfully small, and of themselves do not provide sufficient means of subsistence for the owners, who have to rent other lands from their more fortunate brethren.

CHAP. III, C.

Land Revenue.

Superior and inferior proprietors.

There are only a few scattered instances of *talukdári* tenures in Amritsar. They are mostly found in Rájput villages, to the owners of which the proprietors of a neighbouring village pay a small fixed nominal sum yearly, or a nominal percentage on their revenue. It is rarely more than five per cent. Enquiry usually shows that those who pay this *talukdari* allowance were originally settled by the superior owners as tenants, and, gradually acquiring too firm a hold on the land to be ousted, were recognized at the regular settlement of 1852 as having proprietary right, subject only to the payment of a nominal sum as *malikána* to the superior owners. It is paid in addition to revenue. Two whole estates in Ajnála, part of one in Amritsar, and three plots in the civil station are held on an *inkita málgúzári* tenure, the proprietors having compounded for the revenue when they bought the land from Government. No other special forms of tenure are found in the district.

Riparian customs.

The special riparian customs, which used to exist in the district, have now almost entirely vanished. At last settlement (1892) all but two villages on the Ravi had fixed boundaries, and in these two a permanent boundary with the Sialkot district was laid down by Mr. (now Sir Edward) Maclagan in 1903. The boundary with Kapurthala State was formerly fixed every year in accordance with special rules, but in 1902 a permanent boundary was demarcated by Mr. B. H. Bird, I.C.S. as the representative of the Punjab Government and Diwan Hari Chand on behalf of the Kapurthala Darbar. During the course of the 1911 settlement no special delimitation of boundaries was necessary, but discrepancies discovered in the maps of adjoining riverain villages in the course of the Survey Department's traverse were reconciled.

Tenancies.

Table 38 of Part B gives the number and area of holdings cultivated by the owners themselves at each quinquennium since 1893. At that date of the whole cultivated area, 53 per cent. was cultivated by the owners themselves, $1\frac{1}{2}$ per cent. by favoured tenants paying no rent, 7 per cent by tenants having a right of occupancy, and the remainder, $38\frac{1}{2}$ per cent. by tenants-at-will. The percentages have altered considerably since then, only 48 per cent of the cultivated area being now tilled by the actual owners. Many of the proprietors are absent for years together on military or other service, or have emigrated permanently to the new canal colonies. The percentage held by tenants with a right of occupancy, most of whom pay a small cash *malikana* in addition to the land revenue, has remained unchanged. One per cent is cultivated rent free, usually by way of a charitable concession to the village priest or some similar functionary, the balance of 44 per cent being held by tenants-at-will, among whom rents in kind are more common than rents in cash in the proportion of four to three. Many of the tenants-at-will are themselves owners cultivating their own land, but by reason of the smallness of their holdings have been compelled to take up land on rent from those more fortunate owners who possess more land than they can cultivate themselves.

CHAP. III. C.

Land Revenue.

Occupancy and protected tenants.

The tenants with a right of occupancy fall into two classes. In the first are those who are recorded as having occupancy rights under sections 5, 6 and 8 of the Tenancy Act. These are known as *dakhilkár* or popularly as *maurúsi*. In the second are those who are recorded as having received protection from ejectment or *panah* and these are styled *panahis*. The arrangement by which they were given this protection was made at the revised settlement of 1865, and the period of protection, which was fixed with the aid of assessors after consideration of each case, may be for an indefinite term (*panáh kadím*), for one or two lives, for such time as certain specified service is performed, and so forth. There are many and various such conditions. In practice all but the best informed of the landlords regard the rights of all classes as identical; they are in common parlance all called *maurusi*, and all pay rent at much the same rates. The usual rent is a sum equal to the revenue and cesses of the holding, plus a small *malikana* or landlords' due, which varies from 1 to 4 annas in the rupee of revenue. Many however have had their rents enhanced by decree, and some pay a rent equal to double the revenue, which is not far short of what is paid by tenants-at-will. The average holding is from 1 to 1½ acres.

Tenants-at-will.

Tenants-at-will, as already stated, are usually Jats themselves owning land, members of the industrious Aráin and Kamboh tribes, or else village menials and artizans. Land is in most cases let for a year, the tenant entering from the *kharif* harvest, or say from 15th June. The letting of the land has previously been arranged for in the month of Chet, (March-April), while the *rabi* crop is ripening, and little field work is being done. Near the city, where on market-garden land the rotation of crops takes 22 months to complete, land is often let for two years. It may even be let for a period of ten years, so as to allow the tenant the benefit of the expensive manure he puts into the land. But these are rather lessees than tenants-at-will. With yearly tenants, rent is paid half-yearly in arrear, as a rule, at the same time as the revenue. It is remarkable to what an extent *kamins* (village menials) have of late years taken to cultivation in Amritsar. They either carry on their own trade at the same time, or leave it, and take to cultivation alone. They are most often found cultivating on *barani* soils, not having the capital to cultivate irrigated land, and not being allowed much access to it if they had. Thus they have leisure to pursue their own trade or calling, while the crop is growing. As they live cheaply, and as competition is keen, they are ready to pay high rents, and it is chiefly owing to them that rents within the last twenty years have been pushed up to their present height. Rents may be paid in cash or in kind, or partly in one form and partly in the other.

CHAP. III C.

Land Revenue.

The following account of the early fiscal history is quoted from the Final Settlement Report of 1914 by Mr. H. D. Craik, I. C. S. :—

Fiscal history.

Early history.

"On the decline of the Moghal Empire, the tract now comprised in the "Amritsar district was gradually taken possession of by the more powerful "of the Sikh chiefs and confederacies. Prominent among these in Amritsar "were the Ahluwalia Sardars, and the Ramgarhia, Bhangi and Kanhaya "*misls*. In Tarn Táran the Ahluwalias were all powerful in the south; "most of the remainder was ruled by the Bhangi *misl*. Tahsil Ajnála, "then known as the Saurian *ilaqua*, was more sub-divided. Sardar "Jodh Singh of Saurian, Karm Singh of Chhina, and Nar Singh of Chamiari, held a large part of the country, and the Kanhaya seems to have "been the only one of the confederacies that was strongly represented.

"These chiefs gradually gave way to the dominant power of Maharaja "Ranjit Singh, who, from about 1810 A. D. onwards, began acquiring all "that he could. At first he was leagued with the Kanhaya *misl*. The "Ahluwalias were driven across the river and the Bhangis, the "Ramgarhias, and minor chiefs brought under subjection. The Gil chiefs "still retained some power exercised under the Maharaja at Majitha, and "the Sidhus were in the same position at Atari. The Sindhanwalia "family, which was related to the Maharaja, received a jagir in Ajnála.

The summary and first regular settlements.

"The district as first constituted after annexation included the Talwandi *pargana*, now known as the Raya tahsil, on the right bank of the "Ravi, but this was transferred to the Sialkot district a year or two later. "The summary settlement was carried out by Major Lake in 1849-50. It "was based on the scanty records available of the collections made by the "Sikhs, who had levied revenue by an appraisement of the produce. The "assessments imposed were unequal and in many estates of the Amritsar "and Ajnála tahsils crushingly severe. But the demand so imposed was "only paid for three or four years, as the regular settlement was commenced "in 1852 under the direction of Mr. R. H. Davies. During its progress "certain minor adjustments were made in the district and tahsil boundaries, "which have not since been altered. Mr. Davies' instructions were to impose "an assessment equivalent to the value of one-fourth of the gross produce. "He reduced the demand of the summary settlement by 10 and 11 per cent. "in Amritsar and Ajnála, respectively, and raised it by 7 per cent. in Tarn "Táran. The *jamas* announced were as follows, excluding the sums "assessed on petty revenue free grants:—

	Rs.	*Rate per cultivated acre.* Rs. a. p.
Amritsar	4,32,446	1 15 10
Tarn Táran	2,58,244	1 1 8
Ajnála	2,74,260	2 3 5
Total	9,64,950	

"The fall in prices which commenced in 1851 continued for some years "after the introduction of the regular settlement and it was soon found "that the new demand on the Ajnála tahsil was too severe. A special revision was carried out in 1859 by Mr. Blyth, which resulted in a reduction "of the assessment of this tahsil by 15 per cent.

CHAP. III, C.

Land Revenue.

The second regular settlement.

" The term of Mr. Davies' settlement expired in 1862, two years after " the opening of the Bari Doab Canal. The district was then resettled under " the supervision of Mr. Prinsep, Settlement Commissioner, Agha Kalbiabid " Khan, who had served under Mr. Davies in the same capacity, being his " principal assistant. New records and maps were made for each estate, " assessment circles were recast and rates framed for each. But Mr. Prinsep " wrote no assessment or final reports, and made a personal inspection only " of a limited number of estates. The principle followed in assessing was that " Government was entitled to a share equivalent to one-half of the landlord's " net assets, which were supposed to be 50 per cent. of the gross produce. The " jamas as finally announced in 1865 were as follows :—

Tahsil.	Initial.	Deferred.	Ultimate.
	Rs.	Rs.	Rs.
Amritsar	4,02,895	12,420	4,15,315
Tarn Táran	2,81,323	11,000	2,92,323
Ajnála	2,32,223	10,401	2,42,624
Total ...	9,16,441	33,821	9,50,262

" Deferred assessments were imposed on estates classified as not fully " cultivated and backward, *i.e* :— those in which there was a large area of " waste which Mr. Prinsep anticipated would come under the plough. " In many cases this anticipation has not proved correct. Land watered by " the canal was assessed in its unirrigated aspect, but a fluctuating owner's " rate, or water-advantage rate, of one rupee per acre was imposed on all fields " receiving canal water for the *kharif* harvest. If the same field received " canal water again for the *rabi* harvest, it paid a further rate of eight annas " per acre. The settlement was ultimately sanctioned for a term of 20 years " dating from *kharif* 1865, but was actually in force for as long as 27½ " years in Ajnála. A very full account of Mr. Prinsep's methods, of the " controversy to which they gave rise and of the working of his settlement, " will be found in paragraphs 17 to 24 of the final report of 1893.

The third regular settlement.

" The settlement which has just expired lasted from February 1888 to " October 1893, Mr. J. A. Grant being in charge of the operations. During this period of 5½ years the whole district with the exception of 14 " villages was remeasured on the square system, and a new record-of-rights " was drawn up for each estate. The result of the re-assessment was as " follows :—

Tahsil.	Previous demand.	New demand.	Increse per cent.
	Rs.	Rs.	
Tarn Táran	3,03,641	4,00,483	32
Amritsar	4,52,739	5,38,644	19
Ajnála	2,70,301	3,17,088	18
Total ...	10,26,681	12,56,215	22

CHAP. III. C.
Land Revenue.

" The fluctuating water-advantage rate was abolished from April 1891 " and a higher schedule of occupiers' rates, differentiated according to the " crops irrigated, was introduced from that date. This schedule is still in " force. All other charges on canal irrigated land were included in the " fixed land revenne, the difference between the *baraní* and *nahri* rates in " each circle being called the *nahri parta*. The rate varied from 12 to 14 " annas per acre in the different circles. The new demand was announced " in Tarn Táran with effect from *kharif* 1891, in Amritsar from *kharif* 1892 " and in Ajnála from *rabi* 1893. The term of the settlement was sanctioned " for twenty years.

Working of the last settlement.

" The assessment was designedly a lenient one and has been collected " easily enough in Tarn Táran and Amritsar and in the Nahri circle of " Ajnála. Small sums had to be suspended in the famine year 1899-1900, " and a part of these was ultimately remitted as an act of grace in connec- " tion with the Coronation of King Edward VII. Remissions on a fairly " extensive scale were required after the floods of 1908 and 1909 in the " lowlying canal irrigated tracts, but in years free from any calamity of a " special nature the settlement has worked smoothly. In the weaker villages " of the Uthar circle there has from time to time been difficulty in realising " the demand, and in the Hithar and Sailab circles it has been constantly in " arrears. This tract has been visited by a series of misfortunes which it " was impossible to foresee. It is however only fair to Mr. Grant to point out " that the assessment he proposed was considerably lighter than that actu- " ally announced, his rates having been substantially enhanced by the " higher revenue authorities."

New settlement.

The recent settlement was begun in October 1910 and completed by the end of April 1914 under the charge of Mr. H. D. Craik, I. C. S. The assessment reports of the three tahsils and the final settlement report of the district, from which the following pages are taken almost without alteration, give full details as to the new revenue demand and the general considerations upon which the new assessment has been based.

Assessment circles

At the settlement of 1893 it was considered that the assessment circles formed in 1865 were inconveniently small and their number excessive. By the combination of adjoining circles the number was then reduced to eleven, four each in Amritsar and Ajnála and three in Tarn Táran. Their names are given below :—

Tarn Táran.	Amritsar.	Ajnála.
Upper Manjha	Bet Bangar	Nahri.
Central Manjha	Jandiala	Uthar.
Bet Bangar	Nahri	Hithar. ... ...
	Mirάnkot	Sailab. ... ...

CHAP. III, C.
—
Land Revenue.

This arrangement was retained for the present settlement, as no physical changes of any importance had occurred. It was found, however, that the Jandiála circle was very unwieldy and that it would be preferable to reduce it in size by throwing into the Bet Bangar circle all villages watered by the Sobráon branch of the canal, and into the Nahri circle all those irrigated by the main branch, thus limiting the Jandiála circle to the tract lying between two well-marked natural drainage lines, the Patti Rohi and Kasur Nala, in which there is no canal irrigation beyond the small area watered by the Kasur branch close to Jandiála town. Effect has been given to this change since the completion of the reassessment and the village note-books have been prepared in accordance with the new circles. The large estate of Amritsar *Khas* and five adjoining villages have been taken from the Nahri circle and formed into a separate circle known as the Suburban, as, owing to their peculiar circumstances, it was necessary to treat them as a distinct unit in assessing. The effect of these changes is shown below :—

Assessment circles in Amritsar tahsil.	Number of estates.	
	Former.	Present.
Bet Bangar	67	86
Jandiála	199	124
Nahri	82	132
Suburban	...	6
Mirankot	29	29
Total	377	377

Assessment by tahsils and circles.
—
Tarn Táran tahsil.

Upper Manjha circle.

"This circle was at settlement considered the strongest of the three. It "certainly contains some of the most fertile estates in the tahsil, and its best "irrigated crops are probably superior to those grown elsewhere. Its culti-"vators are on the whole more industrious than in the Central Manjha. "These considerations, together with the higher pitch of its cash rents, "justify the retention in the Upper Manjha of a scale of rates higher than "in the other two circles, though the circle has not made the same advance "since settlement as the Central Manjha. It has suffered heavily from the "floods of recent years, and the value of land, as shown by the statistics of "alienations, is now lower than in the other circles. The present demand "amounts to 38 per cent. of the estimated half net assets, or relatively con-"siderably more than in the Central Manjha. The percentage of enhance-"ment should therefore be less. The sanctioned new rates and the resulting "demand, compared with those of last settlement, are as follows :—

Soil.	1893.		Demand 1911-12.	Present Area.	Sanctioned rates.	Revenue announced.
	Areas.	Rates.				
	Acre	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	29,647	2 0 0	...	26,493	2 6 0	...
Nahri	30,514	1 9 0	...	52,959	2 4 0	...
Abi	} 66,316	} 1 3 0	...	55	} 1 6 0	...
Barani				45,578		
Sailab	658	1 4 0	...	367	1 4 0	...
Total ...	127,135	...	3,92,539	125,457	...	2,43,280

CHAP. III, C.
Land Revenue.

Central Manjha circle.

"This circle is obviously the one from which the largest enhancement "can be taken. The proportion of irrigation is the highest and the percent- "age of failure the lowest in the tahsil. Holdings are slightly smaller than "elsewhere; less land has been sold, and its selling and mortgaging value is "greater than in the other two circles. The cultivators are almost entirely "Sikh Jats, and though less industrious than in the Upper Manjha, they "have reached a very high pitch of prosperity. The present demand "amounts to only 53 per cent. of the true half net assets.

"The sanctioned new rates and the demand imposed compared with "those of last settlement are as follows:—

Soil.	1893. Area.	1893. Rates.	Demand 1911-12.	Present area.	Sanctioned rates.	Revenue announced.
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	30,510	1 9 0	...	24,569	1 14 0	...
Nahri	52,085	1 4 0	...	86,337	1 12 0	...
Abi	84,318	0 15 0	...	31	1 4 0	...
Barani				53,630		
Total ...	166,913	...	1,88,920	164,567	...	2,59,600

Bet Bangar circle.

"This small circle is a good deal weaker than the statistics would lead "one to suppose. Of its 28 estates, all except three contain some alluvial "land. One, Chak Desal, lies wholly on the eastern side of the deep stream "and is owned by Dogars living in Kapurthala. It is practically all un- "cultivated at present. Two villages are owned by Pathans, two by Rajputs, "one by Mallahs and four by Khatris. In the remainder Jats predominate. "The village site is in nearly every case situated on the edge of the high "bank. Behind it there is a stretch of Bangar land much cut up by ravines "near the *dhaya*, where the soil is either hard and stony or contains a large "admixture of sand. In either case the crops are poor. Owing to the nature "of the soil they require much water, but the canal water cannot reach them on "account of the downward slope of the ground from the edge of the high bank, "and the few wells are very deep and expensive to work. Rain water will not "stand on the fields, but escapes down the ravines into the riverain. Further "back from the high bank there is usually a stretch of better and more level "soil, which in most villages now receives canal water. It is on this that "the people really depend. The competition for it is very keen and there is "more double cropping than is good for the land. On the other side of the "village site and below the high bank lies the riverain soil, first the *pakka bet* "and further out the *kacha bet* or *mand*. Serious deterioration has "occurred since settlement in this riverain land. Practically every estate "in the circle has suffered from this cause, and good *sailab* cultivation is "now found only in the two villages of Munda and Dhunda, in which "alone sugarcane is grown. In the others the only *sailab* crops of impor- "tance are coarse rice, wheat, *massar*, gram and a little fodder, and none of "them are really good. The *pakka bet*, whether classed as *chahi*, *barani* or "*sailab* at last settlement, bore a fixed assessment, and no remissions have "been granted where it has fallen out of cultivation. This system has

CHAP. III, C.

Land Revenue.

Bet Bangar circle.

"worked very unfairly. In Vairowál, for example, there were at settlement "181 acres of cultivation in this strip, with 18 masonry wells. There are "now only 54 acres and 4 wells. The total cultivated area of this village "has declined from 2,423 to 1,696 acres, and the demand is only Rs. 53 less "than at settlement. In Hothian the cultivated area has declined from "582 to 409 acres, but there has been no reduction in the revenue. The "total decrease in cultivation in the circle is 7 per cent. The percentage "of mortgage is less than elsewhere, but this is largely due to the fact that "there has been little emigration to the canal colonies and there is more "genuine indebtedness in this circle. In many villages the people are "reputed to depend largely on the proceeds of cattle theft, for which the "proximity of the river and the Native State affords facilities. The "proportion of irrigation is much smaller than in the other two circles, and "the proportion of failure slightly higher."

The sanctioned new rates and the demand imposed, compared with those of last settlement are as follows:—

Soil.	1893. Area.	1893. Rates.	Demand 1911-12.	Present area.	Sanctioned rates.	Revenue announced.
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	2,379	1 14 0	...	1,147	2 0 0	...
Nahri	5,024	1 1 0	...	9,487	1 12 0	...
Abi	15,240 (Abi and Barani)	0 12 0	..	1	1 1 0 (Abi and Barani)	...
Barani				10,478		
Sailab	6,151	1 4 0	...	5,519	1 4 0	...
Total ...	28,794	...	32,194	26,632	...	36,927

Results for Tarn Táran tahsil.

The final results for the whole tahsil are given in the following table:—

Circle.	Demand 1891-92. Amount.	Demand 1891-92. Rate per cultivated acre.	Demand Imposed. Amount.	Demand Imposed. Rate per cultivated acre.	Increase per cent. on demand of 1911-12.
	Rs.	Rs. a p.	Rs.	Rs. a. p.	Rs.
Upper Manjha ...	1,86,219	1 7 5	2,43,289	1 15 0	27
Central Manjha ...	1,84,697	1 1 8	2,59,600	1 9 3	37
Bet Bangor	29,567	1 0 5	36,927	1 6 2	15
Total tahsil ...	4,07,310	...	5,39,816	...	31

CHAP. III. C — Land Revenue

Amritsar tahsil.

Bet Bangar circle.

This circle has in one way improved more than any other since settlement owing to the opening of the new Sobráon branch distributaries. The soil, though nowhere extraordinarily fertile, is uniformly a good, light loam, free from *kallar* and sand. The proprietary body is stronger than in any other circle, and the whole tract has escaped the damage by floods from which a large part of the tahsil has suffered. Its weak points are the very small holdings, the depth and consequent expense of wells, the comparatively limited amount of irrigation, and its situation at one end of the tahsil remote from all important trade centres. There is only one railway station in the circle, and the rise in prices has had less effect than elsewhere on the landowner's profits. The former demand was equivalent to 48·5 per cent. of the half net assets. The sanctioned new rates and the demand imposed compared with those of last settlement are as follows:—

Soil.	1893.		Demand. 1911-12.	Present area.	Sanctioned rates.	Revenue announced.
	Area.	Rates.				
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	10,536	2 4 0	...	8,759	2 12 0	...
Nahri	1,456	1 12 0	...	16,221	2 2 0	...
Sailab	853	2 0 0	...	425	3 0 0	...
Abi	29	1 5 0 (Abi and Barani)	...	46	1 10 0 (Abi and Barani)	...
Barani	34,592			21,855		
Total ...	47,466	...	77,665	47,306	...	96,175

Jandiála circle.

This is a large and rather unmanageable circle, containing 199 estates and presenting considerable diversity of the soil. Parts of it, especially near the Batala border, are of the highest class, but in the centre of the circle there is much inferior sandy soil. Here the crops are always sparse and the ears of grain small. Still this *tibba* land has certain compensating advantages, as was pointed out in the 1893 settlement report. It is easily worked and gives a fair yield after quite a light rainfall, when crops on the stiffer soils are a partial failure. The western part of the circle lying on the right bank of the Kasur *Nala* enjoys perennial canal irrigation, but has suffered in recent years from the interruption of drainage and water-logging. What little canal irrigation there is in other parts of the circle is for the *kharif* harvest only. Cultivation has increased by just over 1,000 acres.

CHAP. III. C.

Land Revenue

Jandiala circle.

The former demand was Rs. 2,61,003, or 43½ per cent. of that by the half net assets standard. The sanctioned new rates and the demand imposed compared with those of last settlement are as follows:—

Soil.	1893.		Demand 1911-12.	Present area.	Sanctioned rates.	Revenue announced.
	Area.	Rates.				
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	52,822	2 6 0	...	54,776	3 0 0	...
Nahri	12,067	2 0 0	...	22,917	2 10 0	...
Abi	219	1 6 0	...	121	1 10 0	...
Barani	78,348			66,669		
Total ...	143,456	...	2,61,003	144,483	...	3,38,100

Mirānkot circle.

This circle is the smallest and in every way the weakest in the tahsīl. Much of the soil is poor with a large admixture of sand and *kankar*. Canal irrigation is limited in amount and the supply, except in two or three estates, is scanty and uncertain. Cropping results are poor and the amount of failure considerable. The population is comparatively sparse and its composition weak. In spite of the proximity of the city the value of land is lower than elsewhere, and this is the only circle in which indebtedness is serious. The sanctioned new rates and the demand imposed compared with those of last settlement are as follows:—

Soil.	1893.		Demand, 1911-12.	Present area.	Sanctioned rates.	Revenue announced.
	Area.	Rates.				
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	10,712	2 6 0	...	9,499	3 0 0	...
Nahri	2,102	1 9 0	...	2,847	2 6 0	...
Abi	215	1 5 0	...	179	1 6 0	...
Barani	8,081			8,319		
Total ...	21,110	...	39,450	20,844	...	47,075

Nahri circle: (a) the rural part.

It will be convenient to deal with the six suburban estates separately. As regards the rest of the circle, it is the most profusely irrigated, closely cultivated and densely populated tract in the tahsīl. It has profited more by the rise in rents and land values than any other circle, and the amount of debt is only high

CHAP. III, C. — Land Revenue. Nahri circle: (a) the rural part.

in the vicinity of the city. On the other hand, there has been a substantial decrease in the cultivated area, and holdings are now extremely small. The circle has hardly yet recovered from the effects of a very disastrous series of years. Water-logging exists or is imminent over a large area, and there are few villages whose capacity has not been seriously impaired. Unless conditions are radically altered the prosperity of this circle will always be menaced in years of heavy rainfall. All these considerations pointed to moderation in the new assessment, and it should not be overlooked that practically any alteration in the schedule of canal charges will press more heavily on this circle than on the rest of the tahsíl.

The sanctioned new rates and the demand imposed compared with those of last settlement are as follows:—

Soil.	1893. Area.	1893. Rates.	Demand 1911-12.	Present area.	Sanctioned rates.	Revenue announced.
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	29,265	2 14 0	...	25,408	3 4 0	...
Nahri	18,523	2 4 0	...	19,801	2 14 0	...
Abi	226			234		
Barani	12,164	1 8 0	...	12,096	1 12 0	...
Total ...	60,178	...	1,28,524	57,539	...	1,62,600

(b) the suburban circle.

No rates could be framed that would suit all the six suburban estates, so each was assessed on its own resources as shown by the cash rents, the all-round incidence being approximately Rs. 6-4 per cultivated acre. For the Nahri circle as a whole the new demand amounts to Rs. 2,26,421 or an enhancement of 34 per cent. on that imposed at last settlement.

Results for Amritsar tahsíl.

The final results for the whole tahsíl are given in the following table:—

Circle.	Demand, 1891-92. Amount.	Demand, 1891-92. Rate per cultivated acre.	Demand imposed, 1913. Amount.	Demand imposed, 1913. Rate per cultivated acre.	Increase per cent. on demand of 1911-12.
	Rs.	Rs. a. p.	Rs.	Rs. a. p.	Rs.
Jan Bangar	73,090	1 8 9	96,175	2 0 6	24
Jandiála	2,56,442	1 12 8	3,38,100	2 5 5	30
Miránkot	39,495	1 14 0	47,075	2 4 2	19
Nahri	1,69,617	2 6 3	2,26,421	3 5 8	34
Total ...	5,38,644	...	7,07,771	...	29

CHAP. III, C.

Land Revenue.

Ajnála tahsil.

Nahri circle.

This circle, though not the largest, is relatively the strongest in its revenue-paying capacity, and being situated closer to the railway and the Amritsar markets, it has profited more than the rest of the tahsil by the rise in prices. Though cultivation and irrigation have both declined slightly, 91 per cent. of the present cultivated area is still artificially irrigated and there is little risk of any extensive failure of the crops. Holdings are larger, rents higher, the proprietary body sturdier, and the value of land greater than in any other part of the tahsil. On all grounds therefore the incidence of the land revenue should be heaviest in this circle. The former demand was equivalent to 40 per cent. of the half net assets.

The sanctioned new rates and the demand imposed compared with those of last settlement are as follows :—

Soil.	1893. Area.	1893. Rates.	Demand, 1912-13.	Present area.	Sanctioned rates.	Revenue announced.
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	22,457	2 10 0	...	18,309	3 1 0	...
Nahri	18,110	2 0 0	...	21,404	2 11 0	...
Abi and Barani ...	4,889	1 4 0	...	3,876	1 10 0	...
Total ...	45,456	...	1,00,932	43,589	...	1,20,125

Uthar circle.

Though inferior to the Nahri, the circle is still a fairly strong one, four-fifths of its cultivation being irrigated. The population is less dense than in the Nahri, but the cultivated area shows a smaller decline. On the other hand there are fewer Jat proprietors, more land has been sold since settlement, and prices and rents rule lower. The former demand, which amounted to 41 per cent. of the theoretical maximum, had been fairly easily paid.

The sanctioned new rates and the demand imposed compared with those of last settlement are as follows :—

Soil.	1893. Area.	1893. Rates.	Demand, 1912-13.	Present area.	Sanctioned rates.	Revenue announced.
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	30,616	2 6 0	...	27,024	2 13 0	...
Nahri	13,271	1 14 0	...	17,083	2 7 0	...
Sailab	1,642	1 0 0	...	1,399	1 4	...
Barani and Abi ...	10,330	1 4 0	...	9,247	1 4	...
Total ...	55,859	...	1,11,760	54,753	...	1,31,035

CHAP. III. C.
Land Revenue.

Hithar circle.

In the Hithar only 97 per cent. of the demand imposed at last settlement had actually been collected and suspensions and remissions had been granted in almost every year. The proprietary body is a distinctly weak one, and in spite of very small holdings the price of land and the pitch of cash rents have advanced but little since settlement. Cultivation and irrigation have both decreased, and failure is apt to be heavy in a year of either drought or excessive rainfall. All these considerations pointed to caution in assessment. The circle is one that varies very much in fertility and detailed village inspections showed that while any large enhancement was out of the question, a good deal could be done in the way of redistributing the demand between villages. In some of the weaker estates that have deteriorated since last settlement reductions were required, but there are a few strong Jat and Arain villages that could afford a substantial increase.

The sanctioned new rates and the demand imposed compared with those of last settlement are as follows :—

Soil.	1893. Area.	1893. Rates.	Demand, 1912-13.	Present area.	Sanctioned rates.	Revenue announced.
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	13,860	2 6 0	...	13,216	2 9 0	...
Sailab	2,768	1 6 0	...	3,069	1 6 0	...
Nahri	} 12,125	} 1 3 0	} ...	100	1 6 0	...
Abi				243	1 6 0	...
Barani				10,712	1 4 0	...
Total ..	[illegible] 3	...	50,365	27,349	...	52,280

Salab circle.

Here the cultivated area had declined by a fifth since settlement and less than a quarter of what remains is protected by irrigation. Nearly one-fifth of the crops sown fail completely and yields are never really high. Holdings are miserably small and the population is for the most part sunk in an apathetic poverty. The existing demand represented 52 per cent. of the estimated full amount claimable, and was thus relatively more severe than in any other part of the district. It had always been collected with difficulty and the record of suspensions and remissions seemed to prove conclusively that no enhancement was practicable in the circle as a whole. It was possible, however, to do much to improve matters by a re-distribution of the demand. In a large proportion of estates that had suffered heavily from recent leasonal calamities reductions were granted; but these were balanced by taking an increase in the few strong Jat villages.

CHAP. III, C.

Land Revenue.

The sanctioned new rates and the demand imposed compared with those of last settlement are as follows :—

Soil.	1893.		Demand, 1912-13.	Present area.	Sanctioned rates.	Revenue announced.
	Area.	Rates.				
	Acres.	Rs. a. p.	Rs.	Acres.	Rs. a. p.	Rs.
Chahi	6,110	2 6 0	...	5,562	2 10 0	...
Nahri	104	1 14 0	...	915	2 0 0	...
Sailab	16,650	1 10 0	...	15,764	1 8 0	...
Abi and Barani ...	11,915	1 3 0	...	5,573	1 4 0	...
Total ...	34,779	...	47,134	27,814	...	46,954

Results for Ajnála tahsíl.

The final results for the whole tahsíl are given in the following table :—

Circle.	DEMAND, 1891-92.		DEMAND IMPOSED.		Increase per cent. on demand of 1912-13.
	Amount.	Rate per cultivated acre.	Amount.	Rate per cultivated acre.	
	Rs.	Rs. a. p.	Rs.	Rs. a. p.	Rs.
Nahri	1,00,925	2 3 6	1,20,125	2 12 1	19
Uthar	1,11,600	2 0 0	1,31,035	2 6 3	17
Hithar	50,812	1 12 3	52,280	1 14 7	4
Sailab	53,751	1 9 0	46,954	1 11 0	*nil.*
Total ...	3,17,088	...	3,50,394	...	13

Financial results of re-assessment.

Over the whole district the revenue was raised from Rs. 12,70,252 to Rs. 15,97,981 or by 26 per cent. In Tarn Táran the percentage of enhancement was 31, in Amritsar 29 and in Ajnála 13. The above figures all relate to the ultimate demand, which is thus well within the limit of Rs. 16,07,000 prescribed by the Government of India. The initial enhancement is Rs. 2,99,104 or less by Rs. 18,459 than 25 per cent. of the old revenue. The tahsíl totals are noted below :—

Tahsil.	Old demand	NEW DEMAND.	
		Initial.	Ultimate.
	Rs.	Rs.	Rs.
Tarn Táran	4,12,652	5,26,241	5,39,816
Amritsar	5,47,409	6,93,371	7,07,771
Ajnála	3,10,191	3,49,744	3,50,394
District ...	12,70,252	15,69,356	15,97,981

CHAP. III, C.
Land Revenue.

Sanctioned soil rates.

The following statement exhibits the acreage rates sanctioned for the various classes of cultivated land in each assessment circle :—

Tahsil.	Circle.	Chahi.	Nahri.	Abi.	Sailab.	Barani.
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Tarn Táran	Upper Manjha	2 6	2 4	1 6	1 4	1 6
	Central Manjha	1 14	1 12	1 4	...	1 4
	Bet Bangar	2 0	1 12	1 1	1 4	1 4
Amritsar	Bet Bangar	2 12	2 2	1 10	3 0	1 10
	Jandiála	3 0	2 10	1 10	...	1 10
	Nahri	3 4	2 14	2 14	...	1 12
	Miránkot	3 0	2 6	1 6	...	1 6
Ajnála	Nahri	3 1	2 11	1 10	...	1 10
	Uthar	2 13	2 7	1 4	1 4	1 4
	Hithar	2 9	1 6	1 6	1 6	1 4
	Sailab	2 10	2 0	1 4	1 8	1 4

As already explained no special soil rates were framed for the suburban circle, which has therefore been omitted from the table. The amount of *abi* land is inconsiderable and in all circles but one it has been classed with *barani* for assessment purposes. In the Amritsar Nahri the bulk of it is valuable land irrigated with liquid sewage from the city drains. It has therefore been put on the same level as *nahrí*. The Municipality imposes a heavy charge for this irrigation. The high rate sanctioned for *sailab* land in the Amritsar Bet Bangar requires a word of explanation. There are only 425 acres of such land, and two-thirds of it are in Sheron Bagha, a fertile estate where rents are specially high.

Progressive assessments.

Under the orders contained in Appendix XX of the Settlement Manual where the enhancement in any village exceeds 33 per cent. by any considerable amount, the amount exceeding that percentage is to be deferred for 5 years. If it much exceeds 66 per cent. a

CHAP. III, C.

Land Revenue.

Progressive assessments.

further sum should be deferred for another 5 years. The total amount deferred in each tahsíl under the operation of these rules is noted below:—

Tahsíl.	Total.	For 5 years.	For 10 years.
	Rs.	Rs.	Rs.
Tarn Táran	13,575	12,575	1,000
Amritsar	14,400	11,200	3,200
Ajnála	650	650	...
District ...	28,625	24,425	4,200

Protective leases on wells.

Remission of assessment was granted on new wells in accordance with the rules contained in paragraph 505 of the Settlement Manual. Protective leases for a period of twenty years from the date of construction have been allowed to the owners of such wells, which number 144 in Tarn Táran, 633 in Amritsar and 488 in Ajnála, or 1,265 in all. The total sums remitted for the first year after re-assessment were:—

	Rs.
Tarn Táran	2,627
Amritsar	12,283
Ajnála	4,873
District	19,783

Assessment of canal irrigated land. Nahri parta.

The orders of the Government of India regarding the assessment of land irrigated by the Upper Bari Doab Canal were to the effect that the system of a fixed *nahri parta* was to be maintained and only such minor changes made in the schedule of occupiers' rates as should not have the effect of raising the total incidence of these rates in the district. In practice *nahri parta* is that part of the fixed assessment which represents the difference between the *barani* and *nahri* soil rates. Thus if in any circle the sanctioned rate for unirrigated land is one rupee per acre and that for canal irrigated land is one rupee and eight annas, the *nahri parta* in that circle is eight annas. It is collected with the rest of the fixed demand, but the Irrigation Department receives a book credit for the total sum realized with each harvest. The rate of *nahri parta* varies from circle to circle, and is applied in each village to the area recorded as irrigated during measurement. In village to village assessment the practice of last settlement was followed and the circle rate was raised or lowered according to the quality of the land irrigated and the abundance or deficiency of the supply of water. Consequently there is no circle in

CHAP. III, C.
Land Revenue.
Assessment of canal irrigated land. Nahri parta.

which the sum actually imposed as *nahri parta* coincides exactly with the result of the application of the circle rate to the area recorded as irrigated. The following statement shows the old and new rates and the total amounts now imposed as *nahri parta*. The transfer of these sums by book credit to the Irrigation Department has been formally sanctioned by Government.

Tahsíl.	Circle.	Rates of nahri parta per acre. Old.	Rates of nahri parta per acre. New.	Total amount of nahri parta.
		Annas.	Annas.	Rs.
Tarn Táran	Upper Manjha ...	6	14	42,531
	Central Manjha ...	5	8	42,581
	Bet Bangar ...	5	11	5,170
Total Tarn Táran		...	...	90,282
Amritsar	Bet Bangar... ...	7	8	13,033
(Note.—Circles as rearranged after Settlement.)	Jandiála	10	16	4,164
	Nahri	12	18	35,412
	Suburban	...	28	9,231
	Mıránkot	4	16	2,614
Total Amritsar		...	...	64,454
Ajnála	Nahri	12	17	22,671
	Uthar	10	19	17,856
	Sailab	11	12	578
Total Ajnála		...	...	41,105
Total District		...	...	1,95,841

In the Ajnála Hithar there is no irrigation from the Bari Doab Canal, but a small area of about 100 acres is watered by the Kiran cut constructed and maintained by the Gurdaspur District Board. No *nahri parta* has been imposed and the land has been assessed as *barani*. It pays a water-rate of Rs. 2 for each acre irrigated to the District Board. In the six suburban estates no soil rates were sanctioned and there was consequently no uniform rate of *nahri parta*. The rate was fixed and announced separately for each village or holding. The amount imposed works out at an average of Rs. 1-12 to each recorded acre of irrigation.

In the year before reassessment the following sums had been credited to the Irrigation Department on this account :—

	Rs.
Tarn Taran	39,151
Amritsar	46,894
Ajnala	21,806
District	1,07,851

Consequently the revenues of the department have been increased by an annual sum of Rs. 87,990 as the result of the settlement.

Rules for the imposition and remission of *nahri parta* during settlement.

Government has always reserved to itself power to levy *nahri parta* on land to which irrigation is extended during the currency of a settlement. Similarly where irrigation is cut off or curtailed, a remission of the *parta* can be claimed. These principles are well known to the people, but no detailed instructions for giving effect to them have hitherto been drawn up and there has in the past been much remissness in applying them. This defect has now been remedied. New rules have been sanctioned by the Financial Commissioners and are printed as Appendix III of the final settlement report. They are based on the rules recently introduced in, Gurdaspur, the chief difference being that in Amritsar the village and not the circle, rate of *nahri parta* will usually apply to extensions of irrigation. Petty changes in the area irrigated are to be disregarded and the assessment is only to be changed where the area affected is considerable.

Occupiers rates.

The schedule of occupiers' rates in force on the canal was introduced in 1891 and not since been altered. It is quoted in full at page 10 of this book and need not be reproduced here. On the average of the five years selected as the basis of the produce estimate at the recent re-assessment the annual sum realized as occupiers' rates from the various tahsils was as noted below :—

	Rs.
Tarn Taran	5,74,157
Amritsar	2,75,633
Ajnala	1,86,463
Total	10,36,253

Thus the total taxation on the agriculture of the district amounted, under the settlement now expired, to 23 lakhs of rupees, and under the new settlement will aggregate 26⅓ lakhs in round figures. In Tarn Taran, where nearly every village receives cana water, the canal dues realized 40 per cent. in excess of the old fixed land revenue.

CHAP. III. C.

Land Revenue.

Certain suggestions for amending the schedule were made in paragraph 57 of the Tarn Taran and paragraph 51 of the Amritsar assessment reports. No definite action has, however, yet been taken and Government has lately decided that the general question of revising the rates is to be postponed till settlement operations in the Lahore district are nearly completed.

Assignments revenue.

The total value of all assigments at various periods has been :—

	Rs.
Prior to last settlement	1,92,255
By assessment of 1891-92.	2,29,612
Prior to the recent settlement.	1,99,407
By new assessment	1,99,087

The value of assignments has thus slightly declined in spite of the increased assessment, owing to the resumption of grants for breach of conditions or on the expiration of the sanctioned term. The detail of grants renewed or continued is given below :—

1	2	3	4	5	6	7	8	9	10	
					For the term of Settlement.					
Tahsil.	In perpetuity or during the pleasure of government, including grants for the upkeep of institutions.		For a life or lives.		Continued for the term of the new Settlement.		Petty *mafis* resumed as a grant from government, but land left unassessed for term of new Settlement.		Total.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value	Number.	Value.
		Rs.		Rs.		Rs.		Rs.		Rs.
Tarn Taran	199	63,266	31	3,297	6	168	33	150	269	66,881
Amritsar ...	285	65,346	36	7,024	12	489	25	190	358	73,049
Ajnala ...	200	57,493	49	1,333	2	39	36	292	287	59,157
District ...	684	1,86,105	116	11,654	20	696	94	632	914	1,99,087

Some explanation is required regarding grants for the term of settlement. At last settlement Mr. Grant found that there were some hundreds of petty village *mafis*, either for life or for the term of settlement, of less than three acres in extent. All of these he made over to the owners of the village to do what they liked with for the term of his settlement. The land was included in the assessed area at the *bachh*, but the revenue was not collected and the loss fell not on the owners but on Government. In all cases this arrangement has now been terminated. A settlement has been made,

CHAP. III, C.

Land Revenue.

Assignment of revenue.

usually with the landowners, but occasionally with the ex-*mafidars'* revenue has been assessed and is collected as *khalsa* in the ordinary way. But precedent has been followed in regard to all petty *mafis* of a smaller annual value than Rs. 20, which were released for the term of last settlement. Ninety-four such grants have now been treated in the manner authorized by paragraph 196 (3) of the Land Administration Manual, that is exactly as Mr. Grant treated petty *mafis* of less than three acres at last settlement. The total amount involved is Rs. 632, and, during the term of the new settlement, this sum will go into the pockets of the landowners or, if they choose, of the late *mafidars*, but when the term of settlement expires, it will fall into the *khalsa* revenue. These grants are no longer, strictly speaking, *mafis* and have accordingly been omitted from the registers. The twenty assignments of an annual value of Rs. 696, shown in the statement as renewed for the new settlement, were all of a greater annual value than Rs. 20 and so did not fall within the scope of paragraph 196 of the Land Administration Manual, and were in favour of properly maintained institutions of special sanctity.

Grants intended for the upkeep of shrines were usually entered in the old registers in the name of an individual or of several shareholders. In most cases the entry in the new registers shows the grant in the name of the shrine, to be drawn by the manager for the time being. This change was made with the consent of the *mafidars* and *lambardars* concerned. Where a small grant of this class was enjoyed by a number of shareholders, they were generally induced to select one of their number as manager. It is to be hoped that this practice will lessen the number of disputes as to succession. No new assignment of any kind has been created at this settlement.

The principal assignments, some of which have already been noticed in Chapter I C., are as follows in round numbers: -

Sardar Raghbir Singh, Sindhanwalia, Rs 30,000; His Highness the Maharaja of Kapurthala, Rs. 17,200; Sardar Gulzar Singh, Rs. 14,400; Sardar Balwant Singh of Atari, Rs. 12,000; Sardar Balwant Singh of Raja Sansi, Rs. 5,500; Sardar Umrao Singh Majithia, Rs. 4,900; Sardar Atma Singh, Mananwala, Rs. 4,800; Thakur Harkishen Singh, Rs. 3,400; the minor sons of the late Sardar Bahadur Arjan Singh, C. I. E., Rs. 2,400; the Sardar of More, Rs. 2,400; and Raja Fateh Singh of Lahore 2,400. The Brahm Buta shrine holds a jagir of Rs 9,900, the Akal Bunga shrine, Rs. 7,400, the Tarn Taran temple, Rs. 4,600, the Khadur Sahib shrine, Rs. 2,600, the Golden temple at Amritsar Rs. 1,755, and the Goindwal temple, Rs. 1,689. The Mahants of Chohla and Ramdas enjoy assignments of Rs. 4,400 and Rs. 1,839, respectively. For further details regarding revenue assignments a reference may be made to paragraph 73 of the final settlement report of 1914.

CHAP. III, D.

Miscellaneous Revenue.

Village maps

Re-measurement on the square system was confined to fourteen estates which had not been re-measured since 1865; elsewhere a system of correction of the maps of last settlement was used. An account of the various methods of map correction experimented with and of the system finally adopted is given in paragraphs 21-24 of the final settlement report of 1914.

Record of Rights.

In addition to the maps the new standing record contains the following documents:—

(*i*) The genealogical table which has been placed in a separate portfolio for each village.

(*ii*) A preliminary proceeding citing the notification of the Local Government sanctioning the re-settlement.

(*iii*) An index of field numbers.

(*iv*) The *jamabandi*, compiled from the *khataunis* or holding slips prepared at the time of map correction.

(*v*) Statement of revenue assignments.

(*vi*) Statement of rights in wells.

(*vii*) The village administration paper, which is merely a reproduction of the old *wajib-ul-arz*.

(*viii*) Statement of village cesses. In most estates this is blank.

(*ix*) Mutations sanctioned since the last quadrennial attestation.

(*x*) Orders of the Settlement Officer determining and distributing the new assessment.

(*xi*) The *bachh* statements.

These documents, with the exception of the genealogical table, have been bound up in one or more volumes according to the size of the village. In some large estates seven or eight volumes were necessary.

Section D.—Miscellaneous Revenue.

Excise.

Under the reorganisation scheme of the provincial excise establishment, which came into force in 1910, one excise inspector, three sub-inspectors and one *muharrir* were sanctioned for out-door preventive and inspecting duties in the district, while a similar number of officers, with the exception of the *muharrir*, were sanctioned for work in connection with the Amritsar distillery. A detailed account of the distillery has been given in Chapter II E. It will suffice here to say that it is under European manage-

CHAP. III. D.

Miscellaneous Revenue.

Excise.

ment and supplies country spirit to nearly all districts of the Punjab and to many other parts of India, as well as to the military Supply and Transport Corps. In 1912-13 the amount exported was 2,75,932 gallons, carrying a still-head duty of Rs. 13,67,892. In the district there are seven wholesale licenses for the sale of country liquor ard fifty-five retail licenses. A list of the villlages in which the shops are situated is given in Table 41 of Volume B. The consumption of imported wines is very limited. There is one wholesale license, four hotel and special licenses and five retail licenses, the total income from this source being only Rs. 9,451 in 1912-13. The district is a Manjha tract and surrounded on three sides by the Lahore and Ferozepore districts and the Kapurthala State. Consequently smuggling and illicit distillation are very prevalent. Special arrangements for the suppression of smuggling have been made with the Kapurthala State and with the neighbouring British districts. The Sikh Jats of Amritsar are notoriously addicted to drink, which is responsible for a large proportion of serious criminal cases. The consumption at the various fairs held is inordinate and this has led to the sale of liquor at the Amawas fair at Tarn Taran being entirely prohibited.

Licenses are generally taken out by Jats and Kalals, but other tribes are now following their example, as public opinion has come to regard the sale of liquor as a regular trade or profession and no longer looks upon it with complete disfavour.

Opium.

The cultivation of the poppy is prohibited in this district. Opium is imported from Afghanistan, Mandi, Kulu and Kot Khai, but in decreasing quantities, owing to the increasing popularity of excise opium. Licenses for the sale of opium and poppy heads are given together. Theire are nine wholesale and sixty retail licenses, in addition to twenty-two given to druggists.

Drugs.

The *charas* godown was abolished in 1912 but has since been re-opened under the charge of an excise sub-inspector. In it is stored Yarkand *charas*, which is brought in by a contractor, who holds a provincial license. The consumption of *bhang* has largely decreased of recent years as the figures given in Table 41, Part B, show; the local production is chiefly sold, though some is imported from Hoshiarpur. There are nine wholesale licenses for *charas* and *bhang* and twenty-one licensed retail shops. The consumption of cocaine is small and there is little evidence that smuggling or illicit use of the drug is at all prevalent. In 1912-13 1,24 grains were sold to the public.

Income-Tax.

The new income-tax system was introduced in 1903-04, since when the number of assessees in class I, *i.e.*, income of Rs. 1,000 to Rs. 1,500, and in class II, incomes of Rs. 1500 to Rs. 2,000, has remained fairly constant, while there has been a gradual but steady increase in class III, incomes over Rs. 2,000. In 1912-13 there were 1,110 assessees and a total collection of Rs. 88,393.

CHAP. III, E.

Local and Municipal Govt.

Income-Tax.

About half the income-tax of the district is paid by assessees in Amritsar city owing to the large number of trades and occupations of a lucrative nature followed. Lahore is the only city in the Punjab where the income-tax is greater. In 1912-13 there were only 172 objections to income-tax, giving a percentage of 15.5 on the number of persons assessed, in comparison with the provincial figures of 32.5. No difficulty is experienced in the collection of the tax. The money-lending and grain-dealing classes pay the bulk of the tax, but in Amritsar city hide, timber, wood and other merchants belonging to non-money-lending classes figure largely amongst the assessees. Statistical details of collections in the city and tahsils are given in Tables 42 and 43 of volume B.

Section E.—Local and Municipal Government.

Local Boards.

A Local Board is constituted in each tahsil under Act *XX* of 1883. Seven members are nominated by the Commissioner in the Amritsar and Tarn Taran tahsils and six in Ajnala; the remainder are elected by such residents as possess the necessary qualifications under the Act. The number of elected members was originally fixed according to the number of *zails* in each tahsil, but this is not now strictly accurate, as the number of elected members in Tarn Taran is still 14, though the number of *zails* has been increased to 16. The Tahsildar is ex-officio a member of the Board and is usually chairman. During the past year the Local Board of Amritsar held two meetings, that of Tarn Taran six, and that of Ajnala eight.

The District Board.

The District Board holds its meetings at headquarters and the Deputy Commissioner is ex-officio chairman. Besides him there are twenty other members, of whom four are nominated and fifteen elected from among the members of the Local Board of each tahsil. The Superintendent of Police is now an ex-officio member. There is a Secretary to the District Board and also a District Engineer, who are not members, but salaried servants of the Board. The number of ordinary meetings held during the past year was six. There is a permanent finance sub-committee consisting of seven members.

The Board has carried out many large public works in the last few years; perhaps the most important are the metalling of the Amritsar-Ajnala (15 miles) and Ajnala-Ramdas (13 miles) roads, the new market at Tarn Taran with its incidental expenditure on roads, and veterinary hospital buildings at Ajnala and Tarn Taran. Many new primary schools have been built by the Board and alterations and extensions made to existing schools. Considerable sums are spent in the repair and construction of dispensaries. Special attention is paid to arboriculture, the average annual income from trees being Rs. 7,200 and the expenditure Rs. 6,582. The Board maintains thirty-five tree nurseries,

covering an area of 2. 61 acres. The total length of metalled and unmetalled roads in charge of the Board is 71 miles and 307 miles, respectively, and the average annual expenditure on upkeep is Rs. 29,812. The income from roads is as under:—

CHAP. III. E.

Local and Municipal Govt.

The District Board.

(*i*)	From ekka stands on roads	Rs. 4,226
(*ii*)	From license fees under the Stage Carriage Act ...	„ 2,000
		Rs. 6,226

The figure given for (i) represents the average of the past three years, while (ii) was conceded by Government in April 1913. The Board possesses eleven Arab pony stallions but no donkey stallions.

The income of the Board for the year 1913-14 was Rs. 2,21,827, with an opening balance of Rs. 18,627, of which Rs. 1,10,504 was obtained from provincial rates, Rs. 58,027 from civil works and Rs. 42,220 from education. The expenditure for the same year was Rs. 1,94,548, of which Rs. 67,795 was on civil works and Rs. 65,171 on education.

The local rate has lately been raised from Rs. 8-5-4 to Rs. 10-6-8 on the revenue demand by Punjab Government notification No. 211, dated 6th August 1913. This enhancement, together with the increase in the land revenue resulting from the recent reassessment, will mean a considerable expansion of the Board's financial resources.

Municipalities.

Amritsar City.

There are two municipalities in the district, at Amritsar and Tarn Taran, and three notified areas, at Jandiala, Majitha and Ramdas. Table 46 gives a statement of their income and expenditure since 1895-96. The Amritsar municipality was first formed in April 1868 under Act XV of 1867. It has always been of the first class. The Deputy Commissioner is President of the Committee and is the only ex-officio member. Excluding him the Committee consists twenty-six members, of whom eighteen are elected and eight nominated by Government on the recommendation of the local authorities. A member holds office for three years. An Assistant Commissioner holds the appointment of secretary to the Municipal Committee. The Committee employs an engineer and a health officer. Government has now taken over the maintenance of the city police, thus relieving the municipality of an annual expenditure of approximately Rs. 60,000.

Octroi and other taxation.

The main form of taxation in force is octroi, formerly known as *dharatchungi*, and this has always been the principal source of revenue. For the first five years after annexation octroi collections stood at about half a lakh per annum, but by 1875 they had risen to about two lakhs. The average for the five years 1895-99 was well over three lakhs and in 1912-13 had risen to over five and three-quarter lakhs. During the time of Maharaja Ranjit Singh it is

CHAP. III, E.

Local and Municipal Govt.

Octroi and other taxation.

said that octroi yielded nine lakhs a year. No other tax brings in sums of any importance. A lakh of rupees is obtained as revenue from the fairs, the sale of water, license and other fees and about a quarter of a lakh from rents of *nazul* and municipal lands, shops and houses. The incidence of taxation per head of the city population is now Rs. 2-13-2.

Water supply.

The municipality supplies the city with water pumped from a number of wells. Recent experiments with convoluted tube wells have proved very successful and in 1912 it was decided to sink forty more of these tubes in a period of four years, ten tubes to be sunk per annum. This should enable the water supply to be maintained throughout the twenty-four hours of the day in the hot weather. The daily consumption of water was 7·32 gallons per head of population in 1913, and the cost of pumping worked out at 7½ pies per 1,000 gallons. The rates per ferrule were increased by about 50 per cent in 1912, thus raising the annual income by an amount of Rs. 7,917. Government had made a grant of Rs. 12,040 for the extension of the water-supply by tube wells.

Drainage.

A further contribution of Rs. 2,20,000 has been made by Government for the underground drainage of *dhab* Khatikan and the Bazar Hari Singh area of the city. Mention has already been made of the efforts to improve the general health of the city by the filling up of *dhabs* or depressions containing stagnant water in and around the city. This project is being vigorously proceeded with and in a short space of time since its inception has resulted in a considerable change for the better in the aspect of the city outskirts. The total estimated cost of the work is Rs. 1,49,997 or slightly less than Re. 1 per head of population, while a further sum of Rs. 1,56, 200 is estimated as the cost of the aquisition of the *dhabs* from private owners.

Sewage disposal.

A sewage disposal scheme was completed in 1912 at a cost of Rs. 1,08,828, an incidence of about 11⅓ annas per head of population. The liquid sewage after being treated in a septic tank is conveyed by masonry channels to irrigate fields south of the city. A revenue of Rs. 9,000 was derived from the first *kharif* crop after the works were completed and it is hoped to extend irrigation gradually, thus increasing the profit from the working of this scheme.

Electric lighting.

A scheme for the electric lighting of the city by means of a power-station has been sanctioned, but at the moment of writing the arrangements for floating a loan for this work have not been definitely completed. An amount of Rs. 4½ lakhs will probably be required. An annual report of the working of the Municipality is printed and published at the Municipal Press.

Tarn Taran Municipality.

In Tarn Taran, a small town but important as a religious centre, a municipality was formed in March 1886 with a committee of nine members, three nominated and six elected. It has

CHAP. III. F.

Public Works.

an annual income of between Rs. 11,000 and 12,000, mainly derived from octroi. A comprehensive drainage scheme is at present under preparation.

Notified areas.

Of the three notified areas, two—Jandiála and Majítha—were for a number of years municipalities. In October 1912 Jandiála was reduced to the status of a notified area with a committee of five nominated and one *ex officio* member. The major portion of the drainage scheme proposed by the committee has been sanctioned and proposals for the minor portion are to be submitted shortly. Majítha became a notified area in April 1908 with a committee of four nominated and one *ex officio* member. Its income, like that of Jandiála, is chiefly derived from octroi. Ramdás, a large village in Ajnála, has been a notified area since 1892 with a committee of two nominated and two *ex officio* members. The following table gives in a succinct form the constitution and incidence of taxation in all municipalities and notified areas of the district :—

	Number of members.				Date of constitution.	Incidence of taxation per head of population.
	Nominated.	*Ex officio.*	Elected.	Total.		
						R. a. p.
Amritsar	8	1	18	27	11th May 1886 ...	2 13 6
Tarn Táran	3	...	6	9	1st March 1886	2 1 8
Jandiála	5	1	...	6	8th October 1912	0 2 11
Majítha	4	1	...	5	4th April 1908...	0 6 8
Ramdás	2	2	...	4	28th November 1892.	0 4 8

Section F.—Public Works.

Public works.

The Amritsar Sub-division (Buildings and Roads branch) was attached to the Jullundur Division till October 1912, when it was transferred to the 2nd Lahore Provincial Division. It maintains only one road, the Grand Trunk, between Beas and Attári, a total distance of 44·69 miles. Originally it comprised the Amritsar and Gurdáspur districts, but owing to certain major works in the two districts being under construction at one and the same time it was split up into two, the Amritsar and the Gurdáspur Sub-divisions, in 1913.

The works carried out by the Sub-division are both imperial and provincial. The major works recently constructed are.—

(1) Subsidiary jail at Amritsar, almost finished.
(2) Gharinda rest-house in Amritsar district.
(3) Bhindi Saidan rest-house in Amritsar district, almost finished.
Agricultural station at Gurdáspur.
Kalanaur rest-house in Gurdáspur district.

CHAP. III. H. — Police.

The total expenditure during 1912-13 was Rs. 1,98,488-9-8. The staff at present consists of the Sub-divisional officer, who is an Assistant Engineer, two sub-overseers, with three road inspectors, a few mistris and a sub-divisional clerk.

Section G.—Army.

Army.

The detachment of troops at Amritsar forms a portion of the Jullundur brigade. The present strength of the garrison is two companies of British Infantry and one double company of Native Infantry. There is also a small detachment of the Royal Garrison Artillery in Fort Govindgarh adjoining the city. The cantonments are situated west of the civil station, behind the district court-house. One company of British Infantry is invariably used to garrison the fort. A company of the Punjab Volunteer Rifles has its head-quarters at Amritsar.

Indian Army recruits

The great popularity of military service among the Sikh Jats, particularly in Tarn Táran, has made Amritsar one of the chief recruiting-grounds for the Indian Army. Practically every regiment in which there is a Sikh company contains many men enlisted from this district; some regiments have whole companies or half companies of Amritsar men. From the whole district there are probably not less than 6,000 men in military employment and another 2,000 in receipt of pensions. The gross amount of pay and pensions disbursed to these has been estimated to be roughly about Rs. 25 lakhs per annum.

Section H.—Police.

The police force is controlled by a District Superintendent assisted by one, or sometimes two, Assistant or Deputy Superintendents. For many years the municipal police were under the control of a City Superintendent, who was generally an Inspector receiving an extra allowance from the municipality. The municipality has, however, been relieved of all police charges since 1911 and the entire force is now provincial. The strength of the force is shown below—

Inspectors	...	...	...	6
Deputy Inspectors	...	...	...	32
Head constables	...	...	...	123
Sowars	...	...	...	3
Constables	...	...	...	905
		Total	...	1,069

Of these one Inspector, 4 Sub-inspectors, 54 head constables and 416 constables are employed in the city and one Inspector, 2 Sub-inspectors, 6 head constables and 52 constables in the new civil lines police station, which was opened on January 1st, 1914. The

CHAP. III H.

Police.

whole municipal area lying outside the city walls and the cantonment are within the jurisdiction of this new station. At Majítha, instead of regular police or village *choukidars*, a special force of town watchmen is employed, consisting of one daffadár on Rs. 9 per mensem and 12 watchmen at Rs. 5 per mensem each. These men are under the control of the Superintendent of Police, but their pay is provided by the notified area committee of Majítha. There are no cantonment police now.

The police stations or *thanas* and outposts are distributed as follows :—

Tahsil Amritsar,—six police stations : three at Amritsar, *viz.*, the city, sadr and civil lines, one each at Jandiála, Kathunangal and Wazir Bhullar (Beas); outposts at Kathanian and Muchhal.

Tahsil Tarn Táran—four police stations at Tarn Táran, Gharinda, Sarháli and Vairowál. One outpost at Kangarh near Atári.

Tahsil Ajnala—three police stations at Ajnála, Ramdás and Lopoke.

There is a cattle-pound at each police station, and three pounds within the city limits. At the present time two punitive police posts are located in the district at Bhuregil, thána Ramdás, and Jabbowál, thána Jandiála. Each post consists of 2 head constables and 12 constables. One tracker is employed as a head constable, 3rd grade, and one as a constable. Trackers cannot be obtained locally. Of late years much difficulty has been experienced in enlisting a really desirable stamp of recruits for the police force. Játs, in particular, are almost impossible to obtain. 68 per cent. of the men are Muhammadans and about 19 per cent. are Sikhs.

Crime and criminal tribes.

Statistics relating to crime are given in Table 34. The mass of the people may fairly be said to be contented and law-abiding. Crimes of violence are not numerous and concerted riots are rare. Murders, when they occur, usually arise out of disputes about women or land, and are sometimes committed under circumstances of peculiar atrocity. The weapons employed are mostly the axe, or the branch-chopper *(gundása)*, which when fitted with a long handle is a most formidable weapon. Homicide cases in the rural tracts more frequently occur as the result of quarrels about the possession of land or building sites, or about cattle-trespass, for only the more valuable crops are fenced and the cattle are often under little control. Of the serious crimes against property, house-breaking is the commonest and a large proportion of offences under this head remain undetected. Cases relating to the abduction of married women are not uncommon. But, though it may be said that the bulk of the people are law-abiding, whole villages, especially in Tarn Táran, sometimes get a well-deserved name for turbulence and require the quartering on them of a punitive post for several years, before they are reduced to reason. Cattle

CHAP. III, H.

Police.

Crime and criminal tribes.

theft is not common, for the district is so thickly populated that the stolen property cannot be taken far without being observed, and there are no uncultivated wastes where the animals can be hidden till the hue and cry is over.

The criminal tribes are not of very great importance. The few Sánsis there are, are scattered widely throughout the different villages, and Báwariyás and Hárnís are hardly ever met with. The latter have from time to time visited the district, from the cis-Sutlej districts, in organized thieving bands, but they are not indigenous. Perhaps the Mahtams are the nearest approach to a criminal tribe. They are found along the Rávi, and occasionally there have been serious riots with bloodshed among them, and they have been known to have been hired as principals in murder cases.

Jails.

The district jail was at one time located within the city behind that portion of the old Sikh wall which ran from the Rámbágh gate to the Háthi gate. In 1875 the prisoners were removed to a new jail, built within the limits of the village of Tung Bála, about a mile and a half to the north of the city. An imposing gateway and lines of quarters were built of solid masonry, as it was intended that this should be a central jail. That idea was, however, abandoned mainly owing to the unhealthiness of the site, and the jail was, in fact, on May 1st, 1910, reduced to the status of a subsidiary jail. There is accommodation for 221 prisoners, including 10 females, and the hospital will hold 16 patients. The daily average number of prisoners confined in the jail during 1913 was 122. They are accommodated in the sheds, which were originally built for the manufactory enclosures and which have now been converted into sleeping barracks with a thatched roof. Prisoners sentenced to a term of more than fourteen days are transferred twice a week to the Lahore Borstal Central Jail. The present buildings have been condemned and a new sub-jail is nearing completion. This building is being erected within a stone's throw of the district court-house.

The total expenditure on maintenance and guarding during the year 1913 was as follows:—

	Rs.	a.	p.
Maintenance	6,058	2	6
Transfer of prisoners	413	6	6
Guarding	4,461	0	0
Total	10,932	8	7

The establishment consists of one head warder, 2 first grade, 11 second grade and 3 third grade warders. The jail is in the administrative charge of an Extra Assistant Commissoner, who acts as superintendent. Tables 48 and 49 of Volume B. give the figures for the number of prisoners, the number of lock-ups and their maximum capacity. No industries are carried on in the sub-jail.

Section I.—Education and Literacy.

CHAP. III, I.

Education and Literacy.

As regards literacy Amritsar stands higher than most districts in the Punjab ; 44 per mille of the people are literate, as compared with 37 per mille for the province as a whole. In Amritsar city the proportion rises to 121 per mille. Table 50 gives the figures for literacy by religions at the last four censuses and shows that an increase of 15 per mille has taken place since 1881. Of the small communities of Christians and Jains 204 per mille of the former and 263 per mille of the latter can read and write. Among Muhammadans only 22 per mille were shown at the last census as literate.

Script.

Apart from English the only forms of writing in common use are the Urdu or Persian script, and Gurmukhi, which is the ordinary written language of the Sikhs. There are unfortunately no figures to show what proportion of the people classed as literate uses each of these forms, but it can safely be said that Urdu is more generally employed than Gurmukhi.

Total number of schools and pupils.

The following table summarizes the educational facilities of the district for both boys and girls, and shows the numbers attending in 1914 at each kind of school :—

Kind of School.	Boys' School.		Girls' Schools.	
	Number of schools.	Number of pupils.	Number of schools.	Number of pupils
High	8	3,786	1	101
Middle	11	2,295	7	910
Primary and Elementary ...	177	10,817	51	3,003
Special	3	420	...	...
Private	110	4,586	Uncertain.	
Total ...	309	21,904	59	12,204

The figures obtained at the last census showed that the percentage of boys of a school-going age, who were receiving some kind of instruction in either public or private schools, was 294.

Indigenous schools.

The number of indigenous schools in the district has been decreasing steadily during the past two decades and there are now only 66 schools of this description, of which 28 are in Tarn Táran, 26 in Amritsar and 12 in Ajnála. The Persian character is

CHAP. III, I.
Education and Literacy.
Indigenous schools.

taught in the majority of these schools, but some supported entirely by Sikhs teach Gurmukhi. Some Hindu schools teach Hindi. In Muhammadan schools the Koran is recited by rote. All are aided by Government. They are situated in the following villages :—

Tahsil Tarn Táran.	Tahsil Amritsar.	Tahsil Ajnála.
Naurangabad	Jallupur (Urdu)	Ajnála.
Jahangír	Ditto (Gurmukhi)	Kamálpur.
Varing	Chabba	Ranian.
Sakhira	Malliáu	Jastarwál.
Ekálgarh	Jhita	Bagga.
Deo	Gagga r h ana	Mahlanwála.
Mírpur	Lahrka	Bal Bawa.
Takhtu Chak	Nihanpura	Fatehwál.
Mal Chak	Chawinda Devi	Kakkar.
Zanardar	Sathiála	Odar.
Shive Nath Pur	Chatiwind	Jhanjhoti.
Fatehabad	Bhattike	Othián.
Kasel	Tarsika	
Bath	Muchhal	
Pul Kanjri	Dhulka	
Basarke Gillan	Vadála Bhittewad	
Jauhal Dhaiwála	Miránkot	
Chohla	Muhdal	
Thathián	Kotli Gujaran	
Chotala	Varian Nangal	
Kang	Tung Pain	
Bhuse	Abdal	
Nurdin	Baba Bakala	
Khara	Kanak Mandi	
Rangarh	Pona Ghat	
Bighiari	Kotli Kadirabad	
Vain Poin		
Lalu Ghuman		

CHAP. III, I.

Education and Literacy.

High Schools.

There are eight high schools, all of which are located in or around Amritsar city. Of these the best known is the Khalsa College with its attached high school.

The Khalsa College.

The purposes of this institution are the maintenance of a college and school constituted so as to impart to Sikh youths an education that shall tend to raise the status of the Sikh people, to promote morality and sobriety of life, to maintain the Sikh religion, to develop active habits and physical strength and to produce intelligent and useful citizens and loyal subjects of the British Crown.

The management of the institution and its property is vested in the managing committee, consisting of 24 members, subject to the general control of the council of 58 members. The Commissioner of the Lahore Division is *ex officio* chairman of the council, and the Deputy Commissioner of Amritsar of the managing committee. The total amount of the endowment fund of the institution is Rs. 17,10,269, out of which Rs. 12,64,980 represent donations from the States of Patiala, Nabha, Jhind and Kapurthala, on which interest is received. The balance Rs. 4,45,289 is in the hands of the committee and is invested in Government promissory notes and with certain banks. Government makes an annual grant in support of the college.

The college is affiliated to the Punjab University up to the M. A. standard in mathematics and the B. A. standard in all other subjects. There are ten professors with a European Principal, who is a member of the Indian Educational Service; the appointment of two other European professors has been sanctioned by the Secretary of State and they are expected to arrive shortly. The number of students on the rolls for the year 1913-14 is 165. There is excellent accommodation for 150 boarders (Sikhs only) in the college boarding house. Hindus and Muhammadans are admitted to the college as day students. In the school department there is a staff of 32 teachers including the head master. The boys, 700 in number, read from the infant class up to the matriculation standard. There is an excellent boarding house sufficiently large to accommodate 500 boarders. The college grounds measure a little over 101 acres and comprise good hockey, football and cricket grounds for the students. A tube-well of the pattern used by the Public Works Department for irrigation purposes has been sunk and a swimming bath adjacent to it is nearly complete. The main buildings, which face the Amritsar-Lahore road, include lecture and science rooms and an examination hall 100 by 52 feet. Behind this are the school class-rooms and a school hall 53 by 32 feet. There is also a *dharamsala* which is attended twice a day by the staff, students and boys. A sub-assistant surgeon is in residence and manages the hospital and dispensary. The professors and masters reside on the premises.

CHAP. III, I.

Education and Literacy.

Muhammadan Anglo-Oriental High School.

This school was established in 1881 under the name of the Anjuman Islamiya School in the Jama Masjid of Sheikh Khair-ud-din. After some years it was raised to the standard of a middle school and in 1885 to a high school, being located in the city in Mori Ganj. The present building was erected in 1901 at a cost of Rs. 65,000, most of which was subscribed locally, and includes a mosque and a boarding-house. Since then the numbers in attendance have increased rapidly; in 1909 the number on the rolls was 580 and it now stands at 1,088. To meet further demands a branch school was opened in Chauk Farid in 1911, which was recognised in May 1913 as a middle school. A project is also on foot to build a school on the site known as the Anjuman Park. The object of the founders of the school was to provide religious and secular education for the Muhammadans of Amritsar. Religious instruction is given daily by moulvis specially appointed for the purpose. The expenditure on the school and boarding house for the year 1913-14 amounted to Rs. 25,780, which was met as follows :—

Grant-in-aid ...	Rs. 8,137	Grant from Anjuman ...	Rs. 4,716
Fees	„ 12,228	Donation from Bahawalpur State	„ 700

The school is under the general superintendence of the Anjuman-i-Islamia but is directly controlled by a managing committee of which Khan Bahadur Sheikh Ghulam Sadiq is the president and Miań Hafiz Ullah the honorary secretary. A provident fund for the masters, who number 46, was started with the assistance of Government in November 1911.

Hindu Sabha High School.

This school was opened in the year 1894 with the object of imparting both religious and secular education to Hindu boys. It teaches up to the matriculation standard of the Punjab University. The school is located in a handsome building near Dhab Khatikan inside the Lohgarh gate and comprises besides 16 class-rooms, a large examination hall, a science room for practical work and an open space outsids for sports. The present school building was completed in 1897 at a cost of about Rs. 75,000. The foundation stone was laid by Mr. C. M. King, I. C. S., Deputy Commissioner of Amritsar, in 1906 and the opening ceremony was performed in February 1909 by Sir Louis Dane, the then Lieutenant Governor of the Punjab.

The institution is under the control of the Hindu Sabha of Amritsar, a representative body of all sections of the Hindu community, which has placed the management in the hands of Rai Bahadur Lala Gopal Das, Bhandari, Pleader and Vice-president of the municipal committee of Amritsar. It is maintained at a cost of about Rs. 17,300 per annum, which is met partly from fees and partly from the income of the Victoria Jubilee grain market, Amritsar, situated near Dhab Basti Ram. The staff consists of 26 teachers and the number of students is at present about 700. There is a boarding house attached to the school accommodating about 42 resident students.

CHAP. III. I.

Education and Literacy.

Government High School.

The Government High School was originally a municipal board school, formerly known as the Amritsar district school, and was founded in 1851. It was provincialised in 1905. When first started it was located in an old Sikh building near the Golden Temple, but was soon after removed outside the city to another Sikh building, in a more open and healthy situation in the Ram Bagh. The presnt main building was erected under the supervision of the Public Works Department in 1863 inside the city, near the town hall. Two blocks were afterwards added to accommodate middle and primary classes.

The school imparts primary and secondary education, teaching up to the matriculation standard of the Punjab University. The number of pupils on the roll is 671, and the staff consists of a European headmaster and 35 English and Vernacular teachers. The institution has lately been provided with a well equipped laboratory for teaching physical science, physiology and hygiene. Instruction in the latter subject includes first aid and ambulance drill. There is a library of useful modern books 'English and Vernacular' for the use of teachers and students. Physical education is receiving increasing attention, games (cricket, football and hockey) and athletics being compulsory, and all necessary gymnastic apparatus has been provided. The boys are medically examined at regular intervals and a record is kept of each boy.

Other High Schools.

Other high schools are the Mission High School, with two branches and one night school, and the Pandit Baij Nath High School, which recently been placed under a managing committee. Both these are aided by Government. There is also a Dayanand Anglo-Vedic High School which is unaided. All high schools prepare pupils for the matriculation examination in both arts and science and each has a separate drill and gymnastic instructor to attend to the physical training of the boys.

Middle Schools.

There are 11 middle schools for boys in the district. Of these six are vernacular at Vairowál, Fatehabad, Botala, Ajnála, Rámdás and Rája Sánsi, and five anglo-vernacular at Tarn Táran, Chabhal, Jandiála, Majítha and Amritsar, the latter being a mission high school. The schools at Tarn Táran and Chabhal are maintained by the District Board, and that at Jandiála by the notified area committee of that place. Almost all the schools are overcrowded, especially that at Ajnála, to which during the past year many boys were refused admission owing to lack of accommodation.

Primary Schools.

In primary schools instruction is provided in reading, writing arithmetic, geography, mensuration, and natural history, but only the first four subjects are included in the curriculum of elementary schools. The old distinction between rural and urban primary

CHAP. III, I.
Education and Literacy.
Primary schools.

schools has been abolished and a uniform scheme of instruction has been introduced. Many primary schools, especially in the city, are overcrowded and increased accommodation is badly required. The six primary schools in Amritsar city are maintained by the municipality; in the district there are 98, situated in the villages named below :—

Tahsil Tarn Táran.	Tahsil Amritsar.	Tahsi Ajnála.
Har-do-Sarli	Valla	Chawinda.
Miánwind	Verka	Bopera.
Jalalabad	Jethuwál	Kohála.
Khadur Sahib	Kathunangal	Bhullar.
Vairowál	Sham Nagar	Lopoke.
Goindwái	Ram Dewali	Bhilowál.
Dhotián	Chandanke	Saurián.
Jamera	Mehta	Jastarwál.
Kot Muhammad Khan ...	Sathiala	Balharwál.
Sarháli	Vadala Khurd...	Jagdeo Khurd.
Lauhka	Khalchian	Chamiári.
Naushehra Pannuan	Jabbowal	Gaggo Mahl.
Palasaur	Dehriwála	Thoba.
Pindori Takht Mal	Tarsika	Ghonewála.
Panjwar	Bhanguan	Bhindi Saiadan.
Mano Chahl	Bundala	Makowál.
Sohal	Varpál	Sangatpur.
Naushehra Dhala	Sultánwind	Khuira Kalan.
Chabal	Sohián	Sahnsra.
Gandiwind	Vadala Viram	Jagdeo Kalan.
Dhand	Sangra	Ugar Aulakh.
Chicha	Mahtáb Kot	Bachiwind.
Bhakna	Udoke	Manj.
Neshta	Bhangali	Odhar
Atári	Raya	Jasraur.
Dhunda	Gilwali	Bhindi Aulakh.
Munda	Gumanpur	Chetanpura.

Primary schools.

Tahsil Tarn Táran.	Tahsil Amritsar.	Tahsil Ajnala
Kairan	Naushehra Nangli	Har-se-Chhina
Sahhbázpur	Chak Makand	Vachhoia.
Jiobala	Bal Khurd	
Khara	Vadála Jauhal	
Sarai Amanat Khan	Chhajjalwaddi	
Pindori Gola		
Mahrana		
Tharu		
Pakhopura		
Kotli Saru Khan		

Special schools.

There are three special schools in the district. The Clerical and Commercial School is maintained by Government and gives instruction in short-hand, typewriting, book-keeping and other kindred subjects likely to be of use to boys intended for a business career. The Municipal Board Industrial School, which has been considerably improved in all ways during the last few years, gives a general education with special instruction in carpentry, smithy and repousse work. There is also a Sikh orphanage school in the city where carpentry, singing and biscuit-making are taught. In addition to these three schools a training-class was opened in 1912 at Rája Sánsi, where primary passboys are given rudimentary education in the principles of teaching. The first session lasted for six months and all the students successfully passed the final examination and were provided with appointments in various primary schools in the district.

Female education.

There is only one high school for girls, situated in the civil lines and known as the Alexandra High School. It occupies a handsome double-storied building and is intended for the education of Indian Christian girls of the better class. To it is attached a Christian girls' middle school. In addition there are six other middle schools for girls, of which five are in Amritsar and one, which is maintained by the District Board, is at Kairon in Tarn Táran tahsil. The five in Amritsar are the municipal board

CHAP. III, I.

Education and Literacy.

Female education.

school, the Arya Samaj middle school, the City Mission middle school, the Hindu Sudhar Sabha middle school and the Guru Nanak Kanya Patshala middle school. Primary schools number 16, of which 10 are under the District Board and are situated in the following villages :—

Amritsar.	Tarn Táran.	Ajnála.
Sultánwind	Tarn Táran	Rája Sánsi.
Botála	Naushehra Panuan	Rámdás.
Mahta	Dhotián	
	Chabba	
	Gandiwind	

Of the six remaining primary schools, two are elementary Sikh Gurmukhi schools and one a Vedic Kanya Pátshála in Amritsar, one is a Church Missonary Society Hindi school at Majítha, and the other two are elementary mission schools at Jandiála and Tarn Táran. The District Board supports 26 lower primary schools and six in the city are attached to the mission. In addition there are two other lower primary schools, a Hindu Sudhar Sabha lower branch and a Guru Nanak Kanya lower branch, making a total of 34 lower primary girls' schools. A number of little girls as well as little boys attend unaided schools in *dharamsalás* where Gurmukhi reading and a little writing is taught. The latest statistics showed that 12,204 girls are receiving some kind of instruction.

Physical training.

Each secondary school in the city has its own gymnastic instructor aud there are three itinerant instructors for District Board schools. To give an impetus to physical training district tournaments are held every year for *mufasil* and high schools. About Rs. 800 are annually spent on these tournaments. In 1913 the District Board provided Rs. 400 and the Amritsar Municipality Rs. 214-13-0 towards the total expenses of Rs. 798-13-0.

Expenditure on education.

The total expenditure on education, distributed between Provincial, District Board and Municipal funds, fees, subscriptions, endowments and other sources is given in table 52 of Part B. Out of a total annual expenditure of roughly Rs. 1,40,000, Rs. 30,000 are provided by the District Board and Rs. 40,000 by the Amritsar Municipal Committee. An increase in the Government grant sanctioned for the year 1912-13 was entirely utilized in improving the

pay of teachers. The minimum pay has now been raised to the level prescribed by Government. The amount received in fees has been steadily increasing year by year since 1904-05 and now averages between Rs. 18,000 and Rs. 20,000.

CHAP. III, I. — Education and Literacy.

Inspection of schools.

The district forms part of the charge of the Inspector of schools whose headquarters are at Lahore. In the district itself there is a District Inspector and an Assistant Inspector with a small clerical staff. These officers not only perform the ordinary work of school inspection, but also give courses of model lessons for the guidance of teachers.

The vernacular press.

During the year 1913 the following printing presses were at work in the district :—

National Press.	Silkok Press.
Akhtar-i-hind.	Ahl-i-hadis.
Roze Bazar Steam Press.	Ahluwalia.
Sanatan Dharm.	Sri Gurmat.
Anglo-Urdu and Gurmukhi	Ahl-i-fiqah.
Punjab Commercial.	Mahadev.
Sri-wah-Guru-Jika.	Coronation Printing Works.
Wazir-i-hind.	Municipal Press.
Riaz-i-hind.	Anwar-ul-qoraish.
Quan-i hind.	Temperance Press.
Majud-i-Ali.	Rafiq-i-am.
Aror Bans.	Munishwar.
Universal Press.	Ram Press
Faryad.	Khalsa Sewak.
Anand Parkash.	George Press.

Of these seven were established twenty or more years ago, the oldest being the Riaz-i-hind, which was founded in 1880. The return of newspapers printed at the various presses shows a total of twenty-four, none of which have a large circulation. The principal newspapers and their circulation are given in the following table :—

Circulation of between 500 *and* 1,000.	*Circulation of between* 1,000 *and* 3,000.	*Circulation of over* 3,000.
	Khalsa Advocate.	Khalsa Samachar.
Suraj Parkash.	Dukh Nawaran.	The Vakil.
Nauratan.	Temperance Guide.	
Mukhbar.	Sanyasi.	
	Nirgunara.	
	Sanatan Dharm Parcharak.	
	Khalsa Sewak.	

CHAP. III, J.

The Civil Hospital.

The Vernacular Press.

The Wazir-i-hind press prints four of these, *viz.* :— Dukh Nawaran, Temperance Guide, Sanyasi and Nirgunara. The Vakil is printed at the Roze Bazar press, the Khalsa Advocate at the Coronation Printing Works, the Khalsa Samachar, Khalsa Sewak and Sanatan Dharam Pacharak at the presses bearing the same names. Other newspapers, chiefly those published in Lahore, circulate in the city.

Section J.—Medical.

The Civil hospital.

The principal hospital in the district is the Civil Hospital at Amritsar. This was established in 1849, and was situated outside the city near the Ram Bagh gate. The building was found to be too small for requirements and the foundation stone of a new building was laid in 1891 on the old police parade ground by Lady Lyall. Its estimated cost was Rs. 1,65,549, but the actual expenditure was considerably higher. The new hospital was completed in 1905 and placed under the control of the Civil Surgeon. The staff consists of two Assistant Surgeons, who act as house surgeons, one Sub-assistant Surgeon, two compounders and three apprentice compounders; in addition there is a female staff, consisting of one house nurse, one assistant and nine apprentice nurses. There are two general wards for Hindus and Muhammedans respectively, with two special wards for paying patients, besides separate female and contagious wards. Of the 124 beds, 24 are reserved for females.

Branch dispensaries.

There are also two branch dispensaries in Amritsar city and seven in the district at Tarn Táran, Ajnála, Majítha, Atári, Mahta, Serai Amanat Khan, Fattehabad and Chabbal. All seven are maintained by the District Board, with the exception of the Tarn Táran dispensary to which the municipal committee of that place contributes. All dispensaries are of the second class, and their ordinary staff consists of one Sub-assistant Surgeon, who is in charge, one compounder and three menial servants. The number of beds varies from four to six. The city dispensaries are supported by funds supplied by the municipality.

Dsitrict Plague Medical Officer.

The medical staff of the district also includes an officer of the Indian Medical Service, who is in charge of plague operations and works under the control of the Civil Surgeon. The activities of this officer are devoted not only to the treatment of the disease but also to explaining to the people the advantages and objects of the various anti-plague measures taken by the officers of Government. The Plague Officer delivers lectures to the boys of district board and municipal schools on the subject of plague and

CHAP. III, J.

The Civil Hospital.

District Plague Medical Officer.

its prevention. He has an auxiliary staff of 49 honorary plague officers. All branch dispensaries are equipped as stationary inoculating stations and four of the sub-assistant surgeons are qualified inoculating officers. There are two Assistant Surgeons on special plague duty.

The medical work of the Amritsar Mission has already been touched upon.

Leper asylum.

The leper asylum is situated about a mile west of the town of Tarn Táran. The original asylum was built and instituted in the year 1858 by Mr. Fredrick Cooper, Deputy Commissioner. It consisted of two double rows of huts, built in lines of 35 each, to accommodate nearly 200 inmates. For its more effective management and closer supervision the institution was made over by Government in 1903 to the Rev. E. Guilford, C. M. S., acting on behalf of the Mission to Lepers in the East. Up till then it had been incharge of an assistant surgeon under the control of the Civil Surgeon of Amritsar, the Rev. E. Guilford acting as honorary superintendent. It was maintained from Amritsar municipal funds, the cost of the lepers' keep being recovered from the local funds of the district from which they were sent. On taking over charge the Rev. E. Guilford demolished the old *kachcha* buildings and erected an entirely new masonry asylum, with well lighted and ventilated rooms, surrounding a large square, well wooded, and with several flower gardens to brighten the general aspect of the place. The asylum will now accommodate 310 inmates. An assistant surgeon, with a compounder and menial staff, is in charge of the place. The Deputy Commissioner and Civil Surgeon are visitors. It is maintained from provincial funds, the local bodies subscribing as before. The annual income is at present Rs. 13,534, and expenses average about Rs. 13,707. The average number of the inmates for the years 1909—1913 has been 186.

In 1889 a home for the untainted children of lepers was started by the Rev. E. Guilford, and about 120 children have been rescued. There are now in the home 36 children, of whom 26 are boys and 10 girls. Isolation from their parents has proved most effective in saving them from the disease.

The town of Tarn Táran has always been the resort of lepers, who flock to it in large numbers. There are in the town itself about 80 lepers who have landed property. The water of the tank attached to the Sikh temple is popularly supposed to be beneficial to lepers bathing in it and drinking it, and any improvement in the condition of the unfortunate creatures so using it is at once put down to the efficacy of the water, which is supplied by natural drainage from the Kasur Nala. The provincial jail for lepers, which was once situated near the asylum, has been removled and provision has been made for criminals afflicted with leprosein one of the central jails of the province,